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THE AMERICAN ELEVATOR AND GRAIN TRADE

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A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

One Dollar Per Annum
SINGLE COPIES, 15 CENTS

VOL. XXXVIII

431 South Dearborn Street, Chicago, Ill., September 15, 1919

NO. 3

Our Ways and Our Means
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It's "What's in a Leg" that generally settles the question of much or little profit in the working of a modern Grain Elevator.

When Diamond Elevator Belting has been installed in a leg, it means the best leg your grain experience has known.

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*Samples of "ELEVAY" for Leg belts, and
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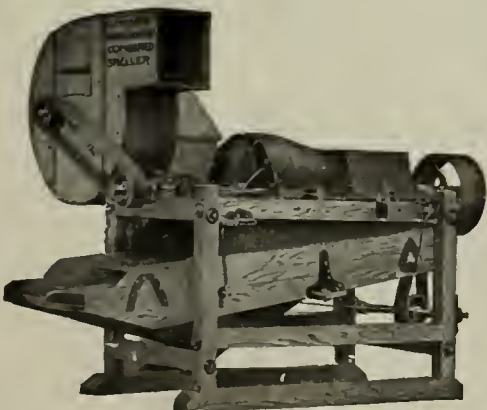
The records of operators
of "Western" machinery
prove the above statement



"Western" Separate Warehouse Sheller

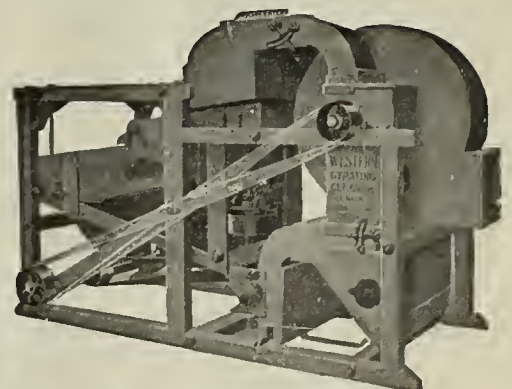
It doesn't make any difference in what part of the country you start the investigation. There you will find representative machines of Western make.

Especially popular is our Western Gyrating Cleaner, shown in the lower right hand corner of this page. It handles grain of all kinds better and cheaper than any other cleaner of equal capacity. It also takes less room, either in floor space or height, than any machine of equal capacity. There are two distinct movements—rotary and oscillating. The improved patented adjustable finger screens are non-chokable and always clean and open, assuring a quick and perfect separation. Special screens for cleaning wheat and other small grains can be easily and quickly adjusted. It is simple, strong and built of best material.



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The real test of the value of a flour mill lies in the profit it will make for its owner.

"Midget" Marvel Millers are making bigger profits in proportion to their investment than any other men in the milling business. Many of our customers have paid for their mill out of the first six months profit.

March 26, 1919.

Anglo-American Mill Co.,
Owensboro, Ky.

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To date we have realized more profits by 100% than we expected in a year.

There is nothing too good to say for the "Midget" Marvel Mill.

Very Respectfully,
J. E. Blankenship & Co.
By J. E. B.

Down in Tennessee Mr. W. T. Dunwoody has just bought his fourth "Midget" Marvel Mill from us. The first three he purchased are operating at neighboring points. The fourth is to be installed in a building in which there was formerly a long system mill. On a visit to our plant last week he said to our President:

"I have been milling all my life, first with the old buhr mills, then with the long system mills, owned several but they all busted me one by one, and I was a poor man when I bought my first 'MIDGET' MILL five years ago on credit. Now I have four mills and am worth \$30,000 on the side."

The "Midget" Marvel is the only small mill that is universally and successfully meeting the competition of the largest mills. The reason is because "IT MAKES A BETTER BARREL OF FLOUR CHEAPER." No mill, regardless of size, can continuously ship flour into a territory where a "Midget" Marvel is operating and sell at a profit.

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*Manufactured in seven different capacities—15-25-40-50-60-75
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Prices and liberal terms make it possible for a man with a small amount of money to go into this profitable business.

Write today for a new and revised book "The Story of a Wonderful Flour Mill," just off the press. You will find it most interesting.

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586-592 Trust Building

Owensboro, Kentucky



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The Sucrene Feed Slogan*

It gives you a grip on the feed business which competition cannot break.

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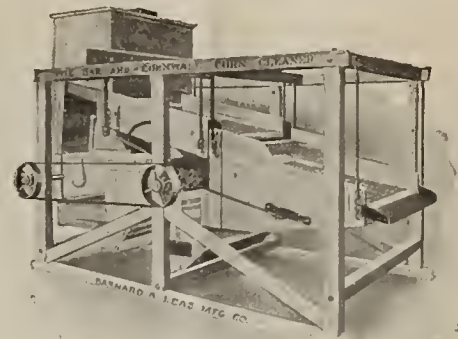
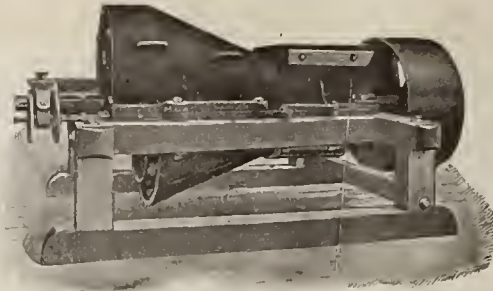
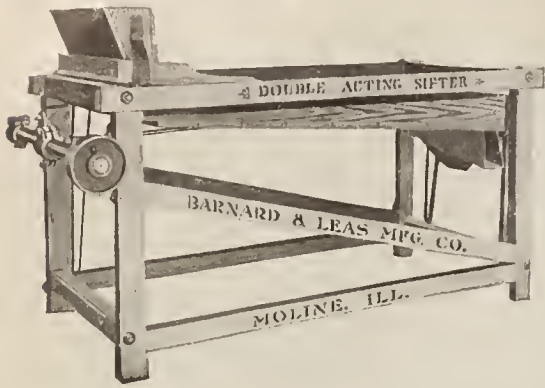
GRAINSTER Belts combine the skill and experience of five leading rubber belt factories which have specialized on Elevator and Conveyor Belting for Grain Elevators for many years.

These factories produced the first belts ever used in handling grain, and they have ever since kept pace with the increasing demands of grain elevator service.

GRAINSTER Belts represent the latest advanced step in this five-factory development of belt service for grain handling.

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Nearly 60 years of solid success and square dealing has won for the Barnard-Moline line its enviable reputation. Repeat orders are the best evidence of satisfaction and we are proud of the fact that many of the largest elevator operators throughout the country have been using the Old Reliable Barnard-Moline line for over fifty-nine years.

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Feed Packers
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Grain Conveyors
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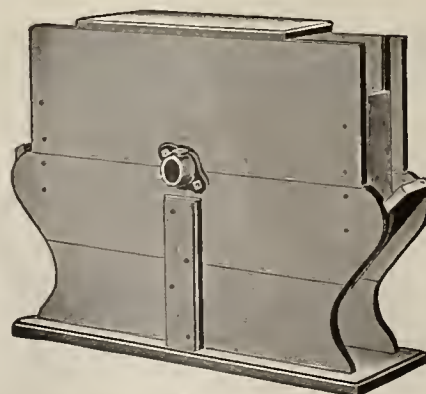
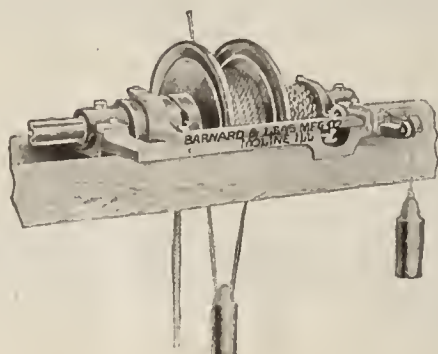
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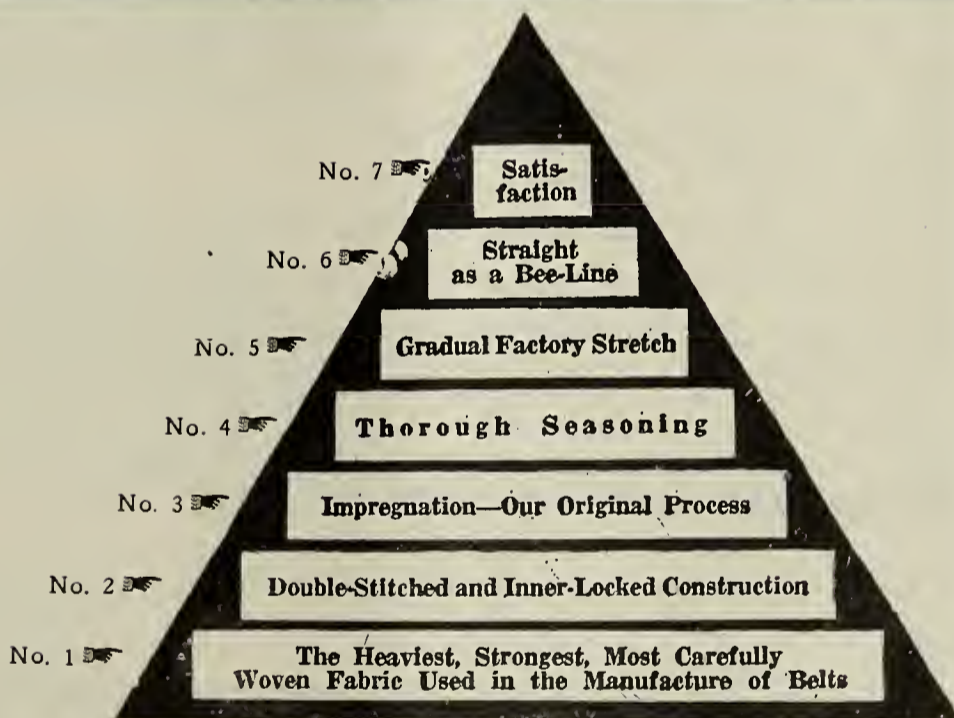
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BELTING



No. 2. Our special double-stitched and inner-locked construction makes the full strength of the tremendously strong Rexall fabric available during the whole life of the conveyor belt because it locks the plies inseparably together so that they pull and wear as one.

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Sixth—It is composed of men of ability, energy and integrity, very high in its personnel of membership, who are co-operating in every way to place and keep

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in all things looking to the promotion of the interests of its patrons.

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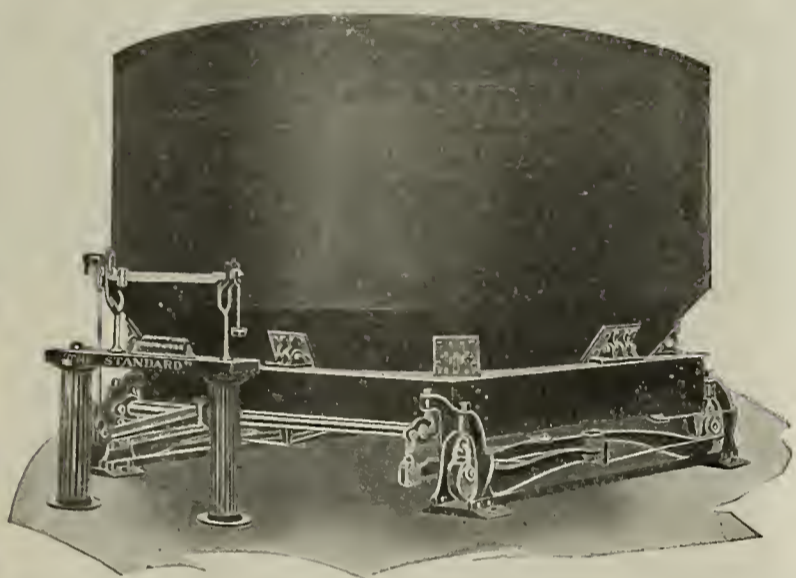
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For Grain Elevators

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"THE STANDARD" Scales are guaranteed to be strictly high-grade throughout, both in materials and workmanship. The name "The Standard" is your guarantee of the very highest quality in scale construction.



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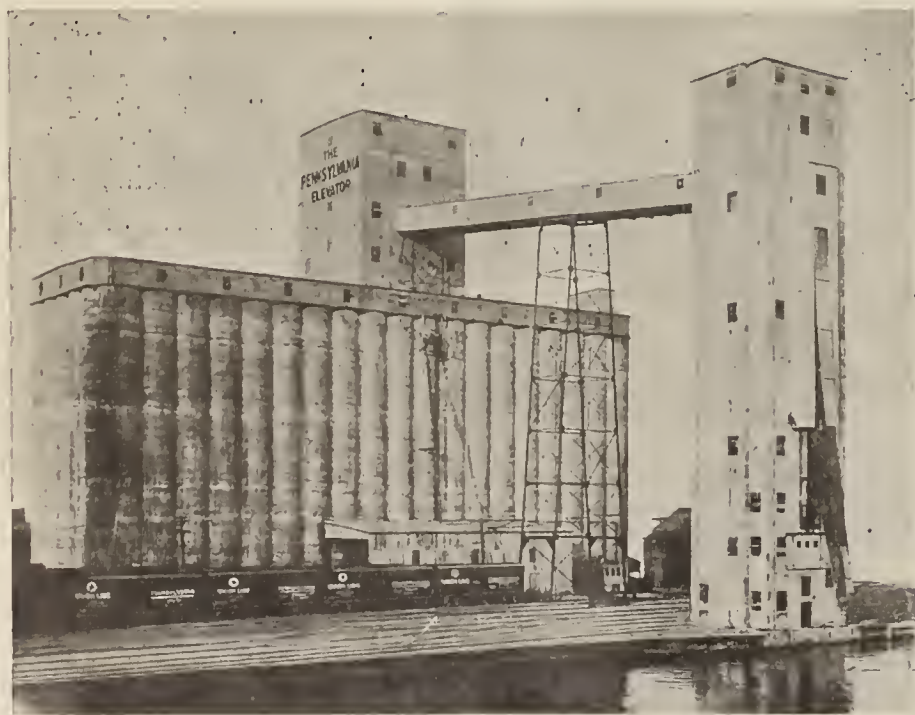
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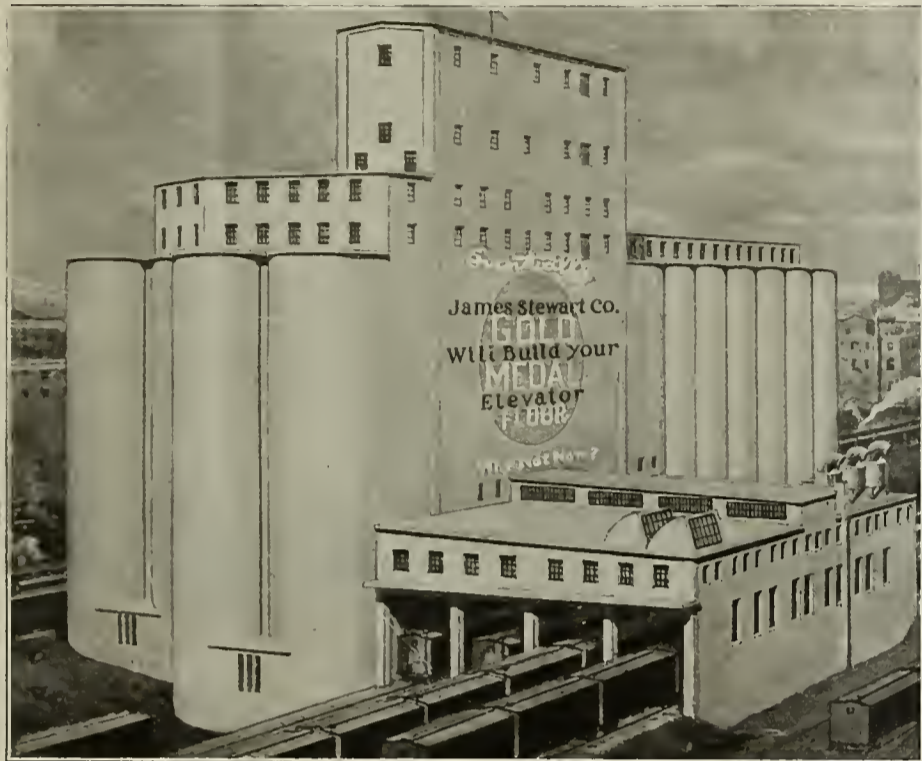
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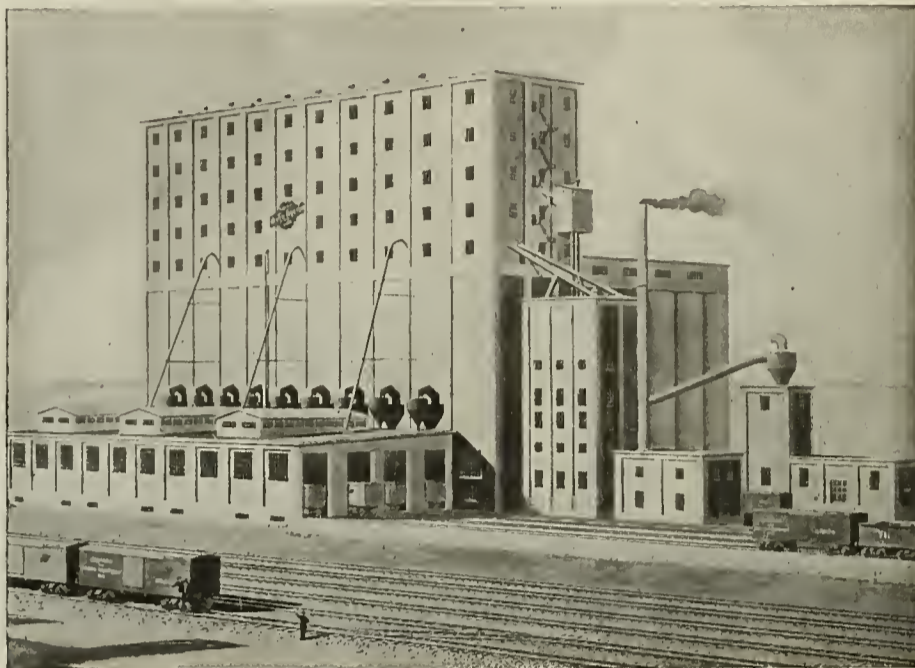
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Designs and estimates promptly furnished

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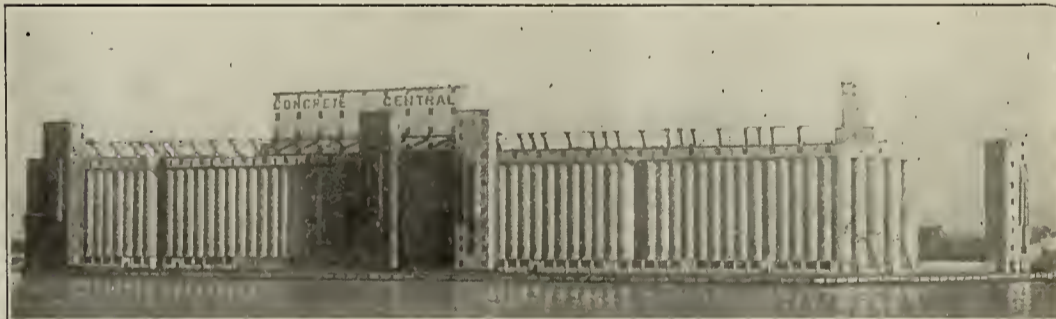
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WALLS, BINS and GRAIN ELEVATORS

By **MIL O. S. KETCHUM**

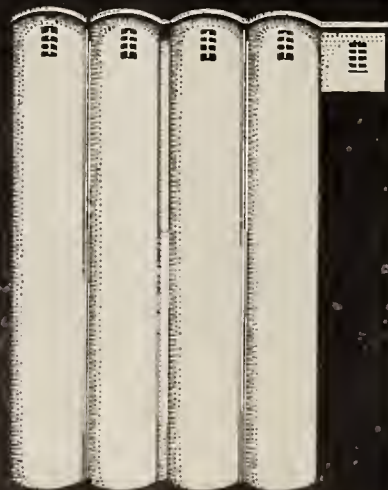
Second Edition. 556 pp., \$4.00

Design and construction are covered completely in this book. The new edition brings it up to the minute with fresh data, new cuts, and a modern treatment throughout. Over 150 pages were added to the old edition. The new chapters on "Reinforced Concrete" and "Methods of Construction and Cost of Retaining Walls" are especially valuable. It is the standard work on stresses due to granular materials.

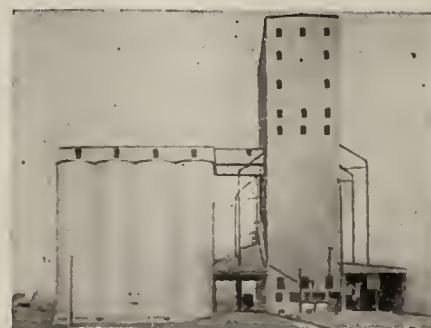
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We were never better equipped to handle new business than we are right now. Our engineering and construction organization is at the top notch of efficiency.

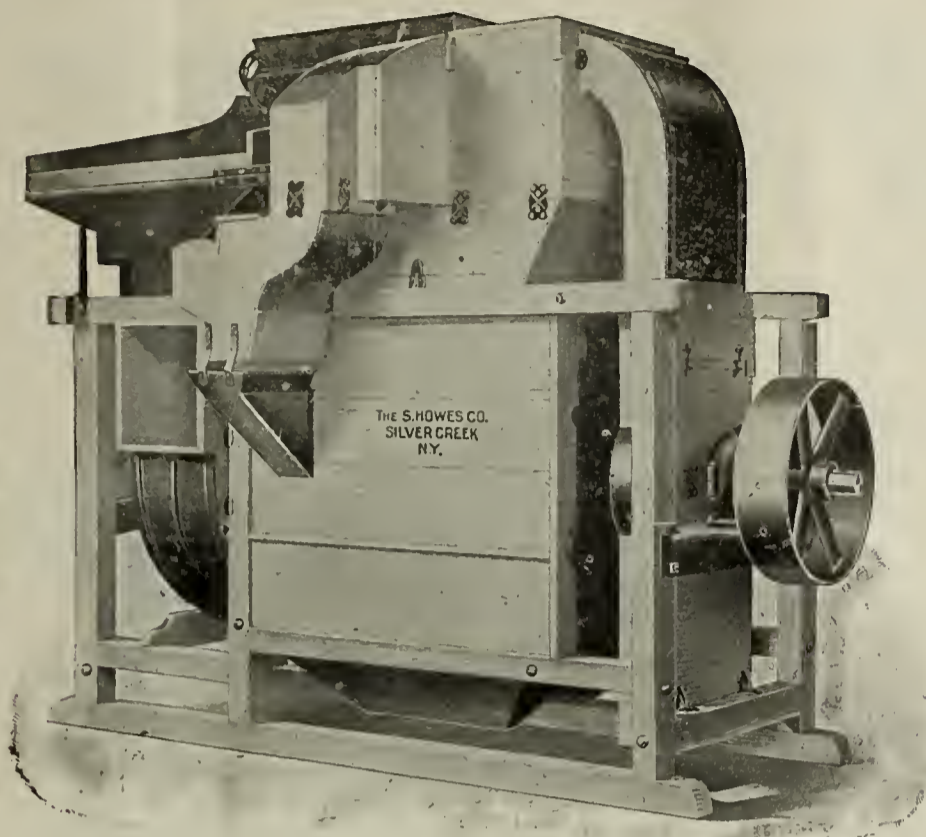
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We build in concrete or wood.

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EUREKA OAT CLIPPERS

have distinguished themselves over a long period of years in the hands of men who insist that things must move with clock-like regularity, and who judge equipment by its ability to do good work 365 days a year.

S. HOWES COMPANY, Inc.
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Oat Clipper

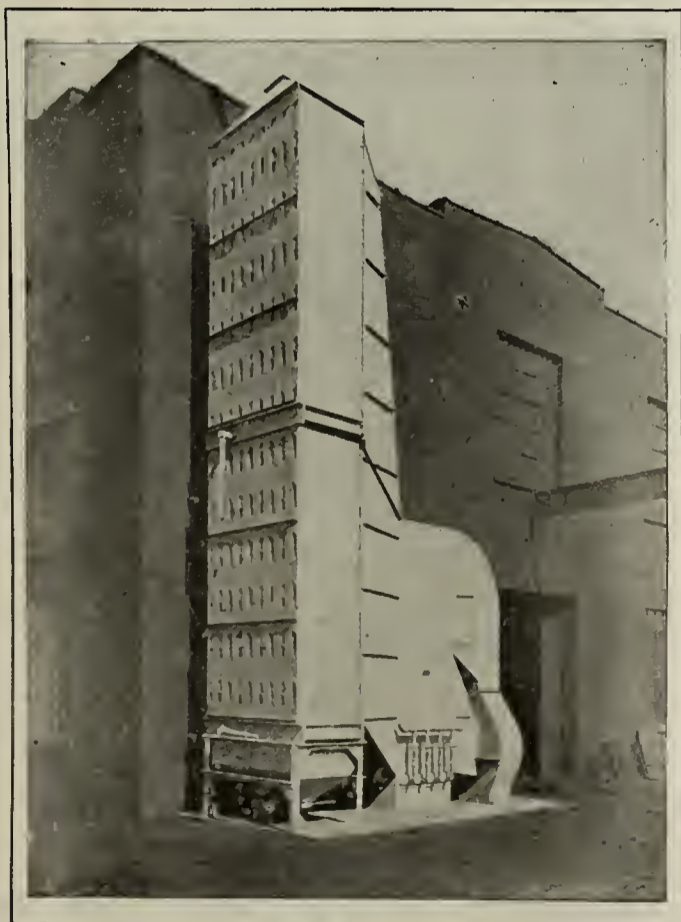


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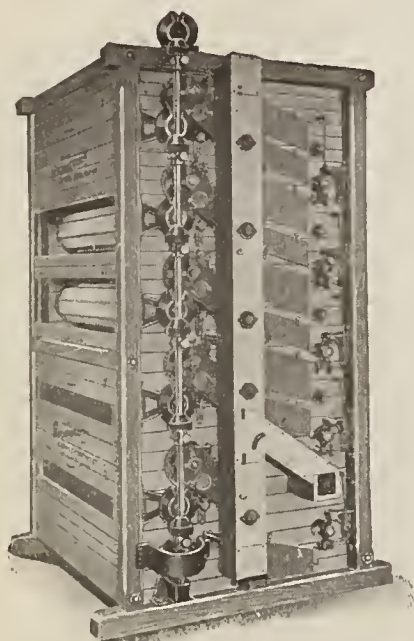
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No. 5—48-inch Richardson Plain
Oat Separator

The Richardson makes practically a perfect separation of oats from wheat or wheat from oats.

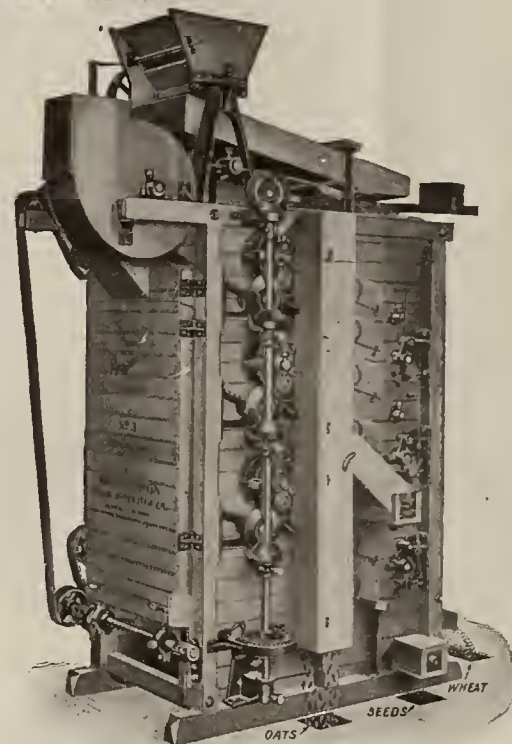
Requires little floor space and power.

Needs little attention. The new center lug aprons run years without attention.

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No House Complete
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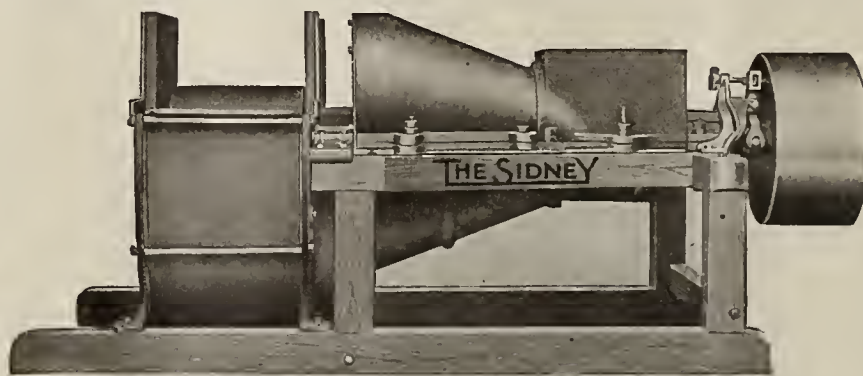


Equipped With Scalper Suction
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A Confidence Born of Many Tests

Your money invested in the practical labor, time and money-saving features of SIDNEY shellers is bound to prove profitable. We particularly emphasize the construction. The frame is made of extra heavy and well seasoned timber firmly mortised and bolted. All castings are of the best grade of grey iron, shelling surfaces are extra heavy and thoroughly chilled, thus insuring long and effective service.



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Note the many advantages of the SIDNEY combined sheller and boot. This machine is a combination of our regular sheller and elevator boot. Requires no expensive hopping under sheller to boot and also eliminates the deep pit or tank under the elevator, which is always a source of much trouble and expense to the elevator owner. In actual tests this sheller has proven the best on the market.

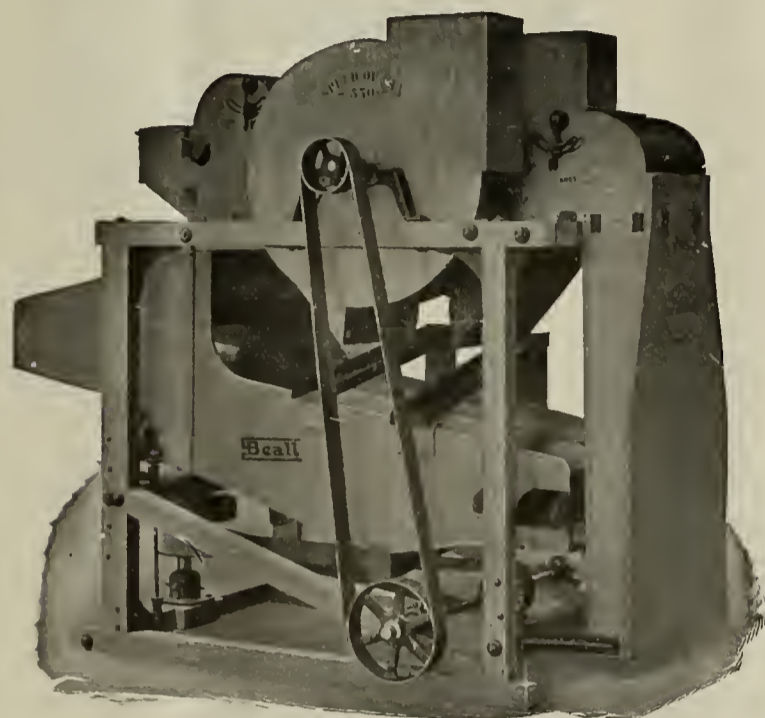
In addition to corn shellers, we manufacture a complete line of GRAIN CLEANERS, GRAIN FEEDERS, OVERHEAD WAGON DUMPS, BALL BEARING MAN-LIFTS, in fact, every item to equip your plant to insure greater economy and better results.



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This machine has made many friends everywhere and
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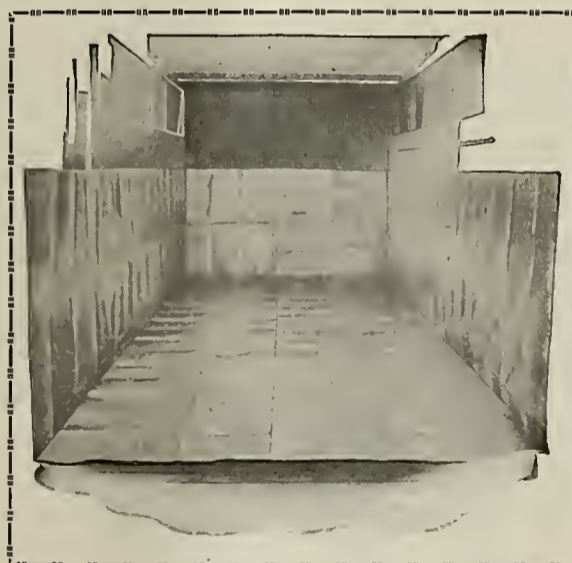
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YOU can do this at an ex-
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with KENNEDY CAR-LINERS—
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United States Railway Administration Order No. 57A provides that shippers cooper all cars; that no claims will be paid
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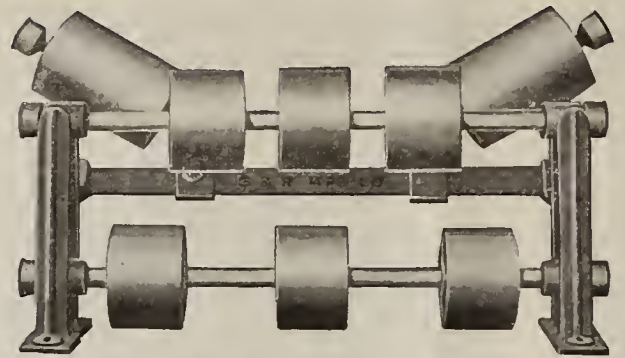
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SHELBYVILLE, IND.

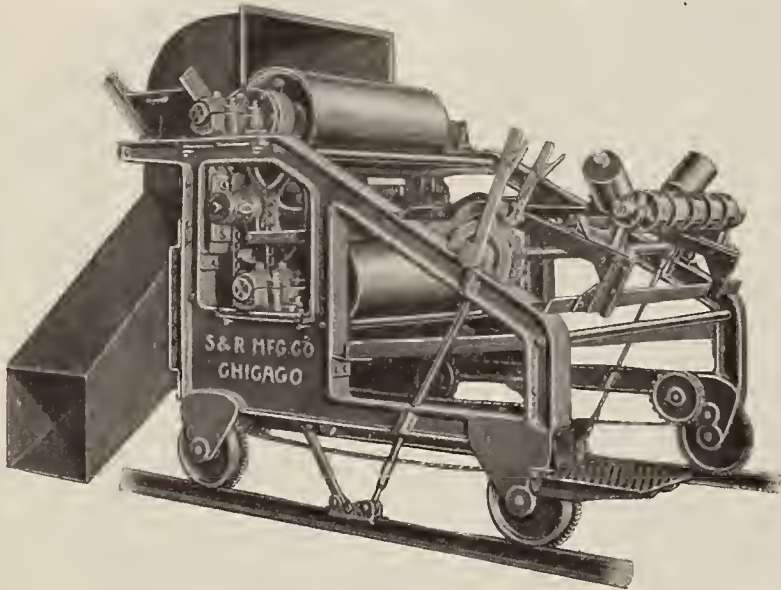
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Style E, Belt Conveyor Tripper

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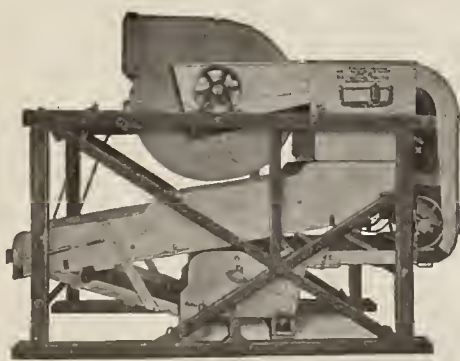
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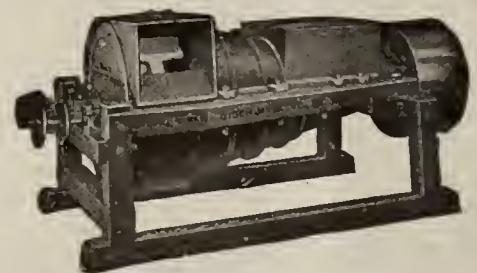
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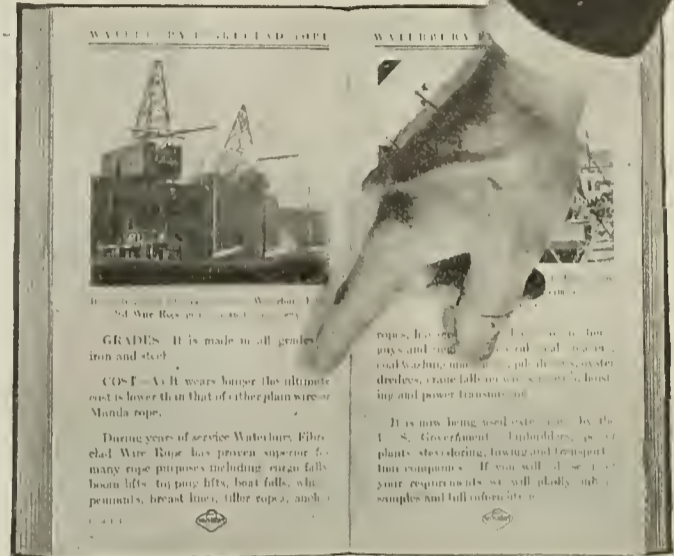
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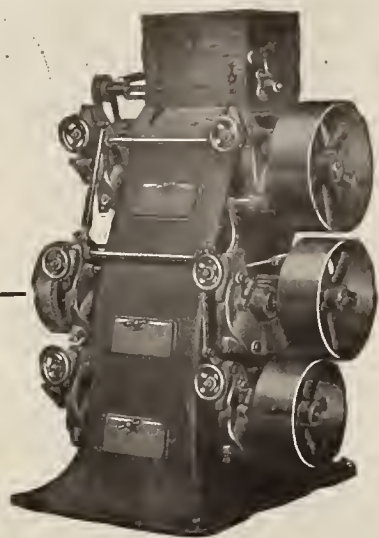
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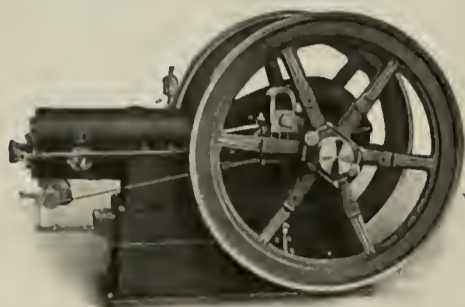
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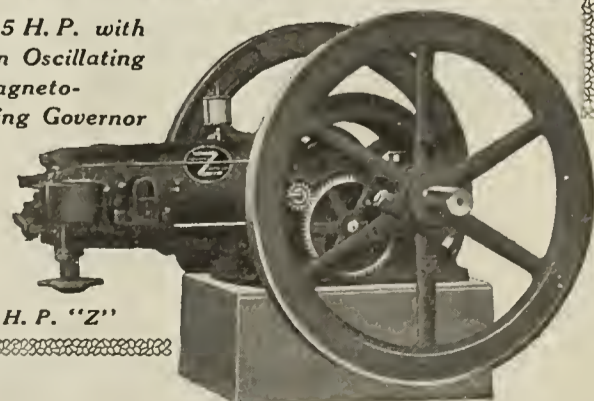
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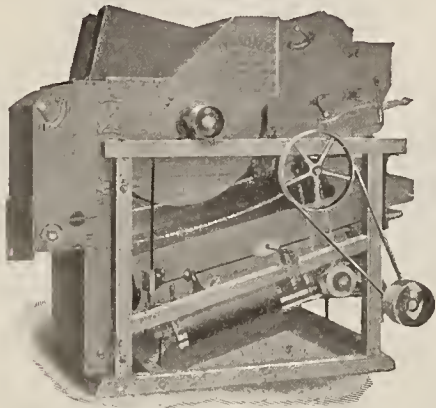
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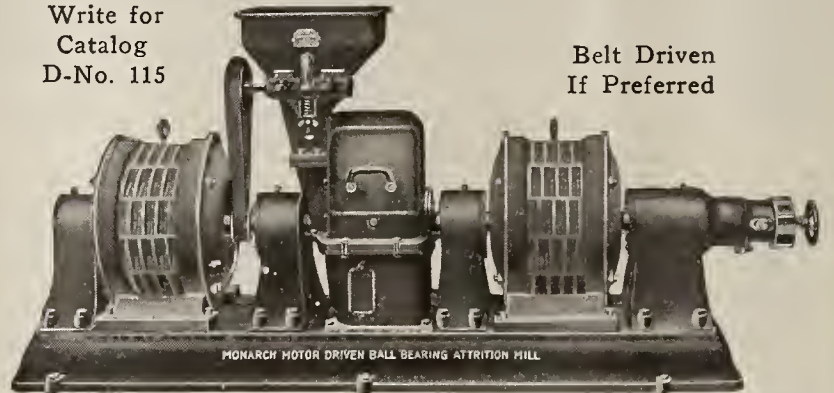
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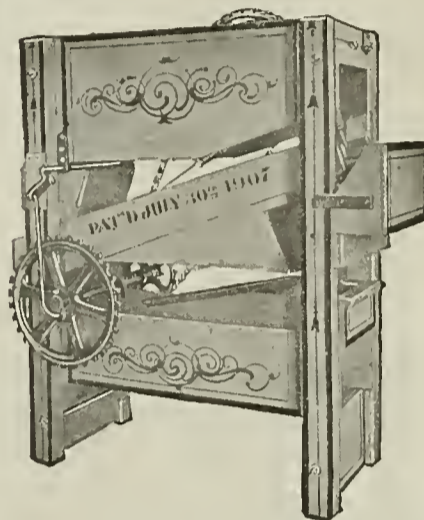
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Endorsed by the Government

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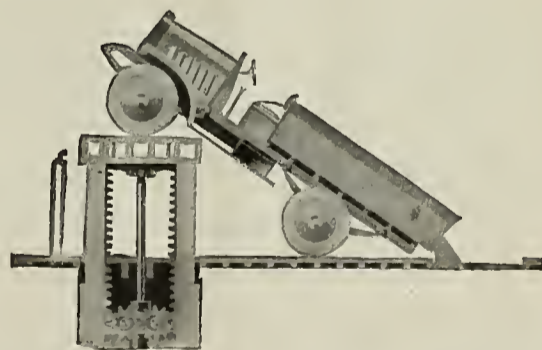
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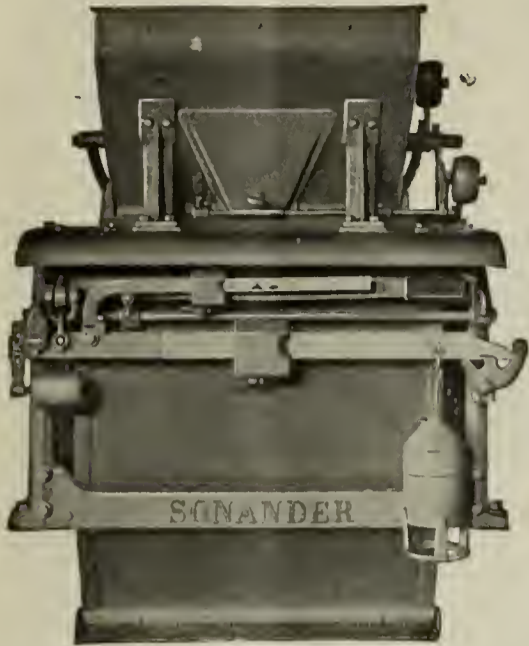
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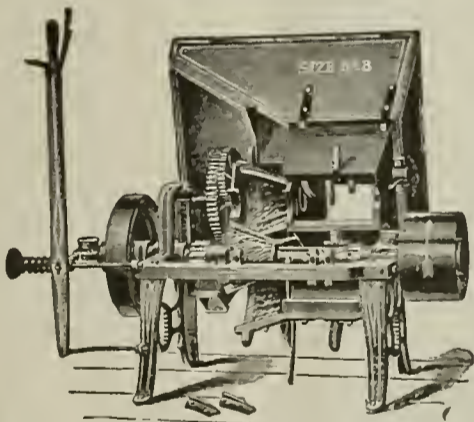
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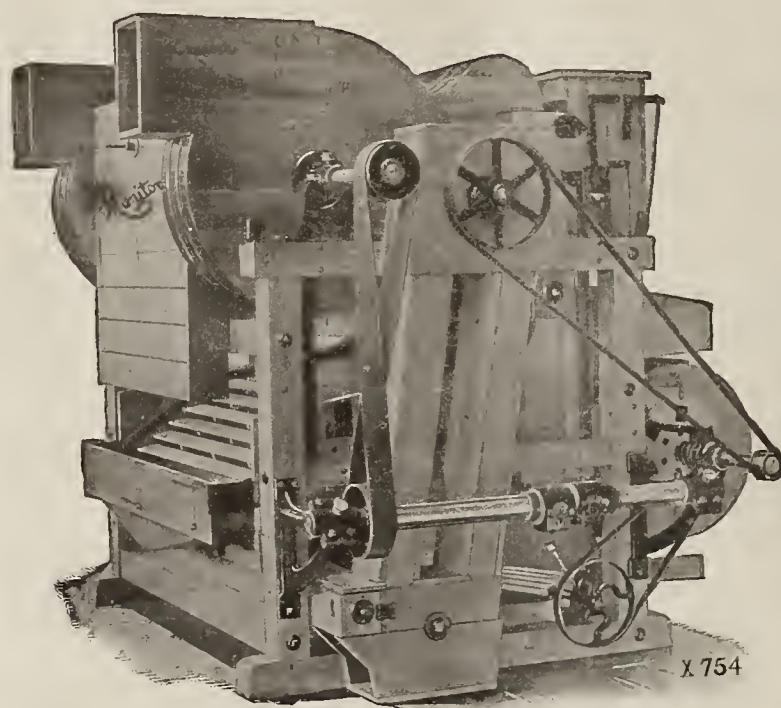
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A monthly journal devoted to the elevator and grain interests.

Official paper of the Grain Dealers' National Association and of the Illinois Grain Dealers' Association.

Established in 1882.



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Established in 1882.

VOL. XXXVIII

CHICAGO, ILLINOIS, SEPTEMBER 15, 1919

NO. 3

New 150,000-Bushel Elevator at Johnson City, Tenn.

THE only difference between a mill elevator and a shipping or transfer house is in the discharge from the bins. In a mill elevator, as a rule, the entire storage capacity empties to the conveyor belt in the tunnel. This eliminates the shipping leg and bin. Otherwise the houses are alike. The modern ideas of elevator construction were well developed in commercial grain houses before any but the largest and most progressive mills adopted them. Now, however, concrete tanks and modern conveying systems are a regular equipment for every new mill.

An example of this progressive development in mill storage is found in the history of the Model Mills Company of Johnson City, Tenn. The mill was built in 1910, a substantial brick building of full mill construction. In 1914 new storage was needed and, as a matter of course, four concrete tanks, 50 feet high, were added, connected with the mill by an overhead gallery by which wheat was conveyed from the receiving leg in the mill to the tanks, and discharged back to the mill by a tunnel under the bins in which was another belt conveyor.

This year the requirements of the mill again outgrew its grain storage and additional capacity of 150,000 bushels was added to the 45,000 bushels already provided. Two more 50-foot bins were added, together with five interstice and two pocket bins of the same height. Connected with these and forming a monolithic whole, 12 round bins, 12 feet in diameter and 92 feet high, were erected. This made room for five interstice and two pocket bins of this height, 92 feet, more than quadrupling the former capacity on a ground space of little over twice the original area.

In addition to this storage plant, six tempering bins were put in between the mill building and the storage annex, supported above the concrete driveway by concrete beams. These bins are 6 feet 1 inch by 7 feet 6 inches in size and are 50 feet high, with a capacity of 5,200 bushels. The wheat is

conveyed to and from the tempering bins by screw conveyors, which, in addition to their carrying work, thoroughly mix the moisture laden wheat. This tempering of the wheat before it is milled is an important part of the process, as it enables the rolls to take off the bran in large flakes, which

by an 18-inch belt to any of the 50-foot tanks, or to a spout which discharges to an elevator leg in the new addition. This elevator carries the grain to the gallery above the 92-foot tanks and the 20-inch belt conveyor distributes it to any space desired.

In discharging the grain from the tanks an opposite course is followed. There is a conveyor tunnel under the new tanks which connects, by a short cross tunnel, to the main conveyor under the 50-foot tanks which takes the grain back to the mill to be processed into flour.

The Macdonald Engineering Company, 53 West Jackson Boulevard, Chicago, were the engineers and contractors who designed and erected the storage structure and installed all the machinery. The machinery was furnished by the Skillen & Richards Manufacturing Company of Chicago, and the belting by the United States Rubber Company. The B. S. Constant Manufacturing Company of Bloomington, Ill., furnished the sheet metal work.

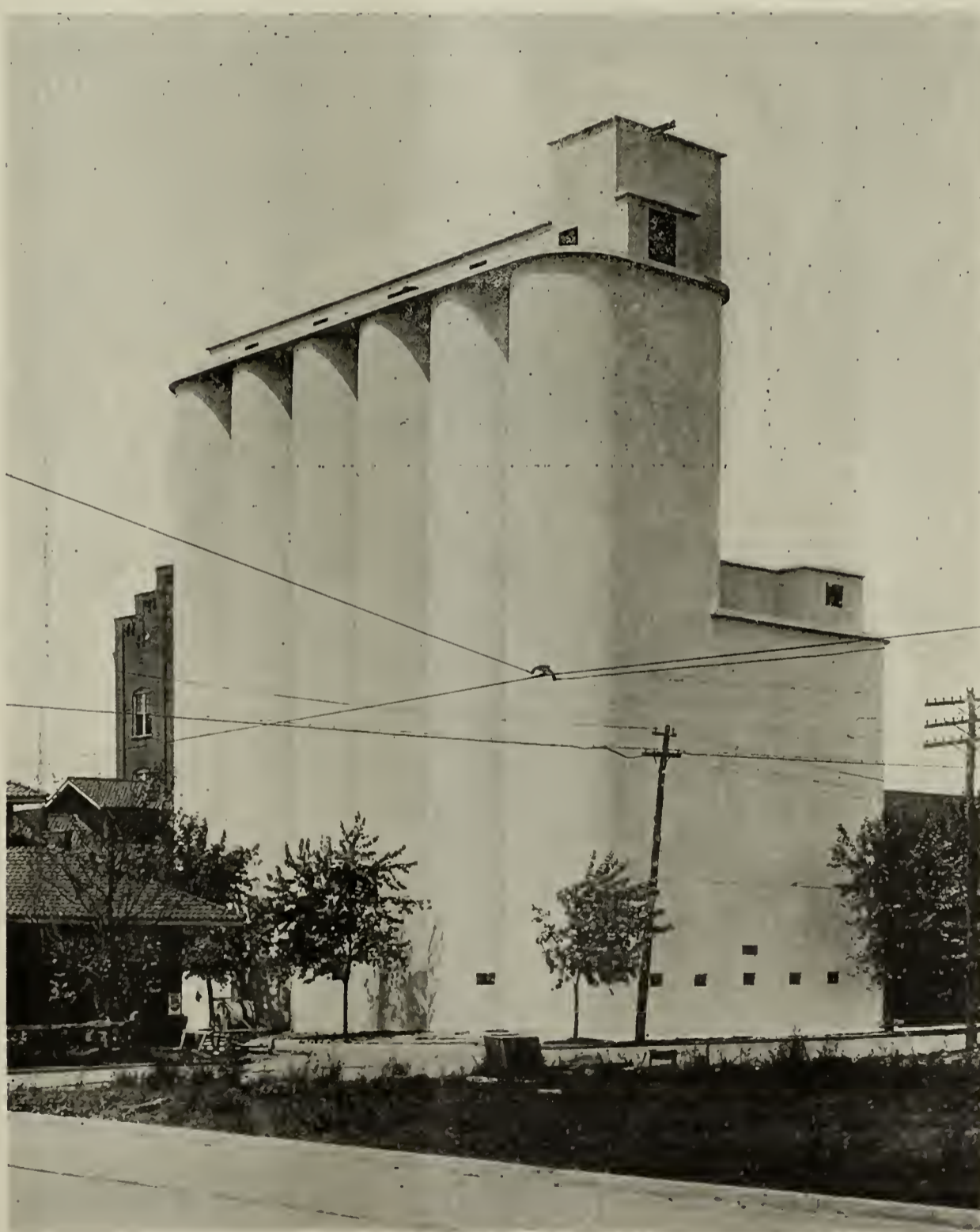
Johnson City is in a direct line between the North and South. Grain from the wheat fields of the West is easily available and the products of the mill supply the great territory south and east of them, which have but few mills of more than local capacity to supply a consuming demand which is very large. New elevators are being built in the South and new milling companies are organizing, but not fast enough to keep pace with the natural increase in population, so that the Model Mill Company is taking no chances in enlarging its storage capacity.

The South is developing rapidly in its grain interests. It has been held back in the past by the general poverty of the section and the necessity of a

can then be scalped off without injuring the color of the flour.

The storage tanks have two conveyor galleries, one over the battery of 92-foot bins and the other at the 50-foot level. The grain comes from the mill receiving leg to the 50-foot gallery and is carried

quick and sure money crop. Cotton and tobacco have supplied this need and have been planted year after year, too often without regard to soil deterioration or the gradual infestation with insect pests. Since the second year of the war, however, the South has prospered and the entire territory



NEW CONCRETE ELEVATOR OF THE MODEL MILLS COMPANY, JOHNSON CITY, TENN.

is in a position to make crop rotation the basis of its agricultural program. In such a program the cereals will have a prominent place. Progressive men have realized that grain production can only be successful where there is a local market for grain which can and will pay the full market price from day to day.

PRICES FOR LOW WHEAT GRADES

Announcement that the United States Grain Corporation would at once declare the basis on which it will purchase the various lower qualities of wheat was made on August 26 by Wheat Director Barnes, following an all-day meeting at the offices of the Corporation, 42 Broadway, during which Mr. Barnes discussed wheat grading and prices received by farmers for wheat with various members of Congress, representatives of farmers' organizations and vice-presidents of the Grain Corporation.

At the close of the meeting Mr. Barnes stated that the Grain Corporation would follow this course as a protection to the producer against underpayment of the proper relative value of his wheat and in order to reassure country buyers of the ultimate value of lower grades on arrival at the terminals. For two years it has not been necessary for the Grain Corporation to announce a basis on which it would buy lower qualities because of the preponderance of high grades of wheat in past crops.

The Wheat Director urged that every possible consideration be given the producer, unfortunate now in the character of his yield, and the establishment of a basis as close to the guarantee price of No. 1 as could be justified by interpretation in favor of the producer of each practical doubt.

In discussing the conference Mr. Barnes pointed out that the relative prices which the Grain Corporation might fix would bear a relation to the guaranteed price at the terminal markets only and not to the current price which in such markets as Minneapolis is ruling 30 to 40 cents above the guarantee basis and that no attempt would be made by the Grain Corporation to reflect any premium basis above the actual guarantee price. He added that with the execution of 17,000 contracts between the Grain Corporation and country mills and dealers, any producer who felt that he was not being fairly treated in grades and price could, by submitting a sample through the mails, receive a decision, binding on the buyer, as to the proper relation to the guarantee No. 1 price at the terminals, but not as to its relation with any premium basis currently ruling in the terminals and outside of the Grain Corporation buying.

These discounts are calculated to give the producer the benefit of every doubt as to the relative value of light weight wheats, in order to protect as far as possible those producers in wide sections that have suffered unfavorable crop developments with the production of an unusual quantity of lower grade wheat.

This scale is effective September 2 and all dealers will be required to pay producers not less than the proper country point reflection of the terminal guaranteed price for No 1 wheat and with the relation for other grades as follows:

- No. 2 Wheat.....3 cents under No. 1
- No. 3 Wheat.....3 cents under No. 2
- No. 4 Wheat.....4 cents under No. 3
- No. 5 Wheat.....4 cents under No. 4

For all wheat otherwise conforming to the specifications of No. 5 or better, but deficient in test weight, discount No. 5 price three cents for each one pound deficiency in test.

Wheat grading below No. 5 for reasons other than deficiency in test weight shall be bought on its relative merits.

Smutty Wheat—To be discounted for 2 cents, for slightly smutty, to larger accounts, according to degree of smut.

Mixed Wheat—Will be taken at discounts ranging from 2 to 5 cents, according to quality, in the judgment of each vice-president.

Mixed Wheat and Rye Grading "Mixed Grain"—

Will be discounted as follows: Estimate the average value of the wheat and rye separately at their proper value and in their proper proportion (figuring the rye at 60 pounds per bushel), make allowance for dockage or other inseparable foreign material, and make such deduction as seems justified, but not less than 5 cents per bushel as a penalty for the mixture.

Garlicky Wheat—To be discounted 2 cents.

A MODERN COUNTRY HOUSE

The Farmers Grain Association of Thayer, Neb., is proud of its new elevator, and well it may be, for it is one of the most substantial and best



HOUSE OF FARMERS GRAIN ASSOCIATION, THAYER, NEB.

equipped 30,000-bushel plants in the whole state.

The house was planned and built by the Burrell Engineering & Construction Company of Chicago. It is 24x36 feet in size, oblong in shape, with rounded ends, and is 92 feet to the top of the bins, with a cupola 15 feet 6 inches high. The elevator is constructed of reinforced concrete throughout and has 12 separate bins.

It is strictly a gravity house and is equipped with one long and one short leg. There is a wagon dump, a separate auto-truck dump and a car receiving hopper. The weighing is done on a Fairbanks-Morse Wagon Scale, a 10-ton auto scale, and an 800-bushel Howe Hopper Scale. A No. 6 Monitor Cleaner puts the grain in condition to store or ship, and a manlift makes all parts of the plant easily accessible. The Union Iron Works of Decatur, Ill., furnished the general transmission machinery. The house has steel spouting throughout, steel draw-offs and is modern in every way.

The power plant is housed in a separate concrete building, the engine being a type "Z" Fairbanks Oil Engine of 15 horsepower. There is a cistern connected with the engine room.

The office is in a separate building and is equipped unusually well for a house of this size. In short, it is an up-to-date plant in every particular and is run in an up-to-date manner. The Association and the builders are to be congratulated on this plant.

FIGHTING THE NEW WHEAT DISEASES

It is interesting to know the steps that have been taken in Illinois and Indiana to prevent "Take-all" and Flag smut from spreading to other wheat states of the Union. The authorities of the two states have been aided by the scientists of the U. S. Department of Agriculture. The precautions

taken in these two states give the promise that the two diseases will not spread beyond the districts where they have appeared and will be completely stamped out in a few years.

All infected wheat will be disinfected before it is used. The straw from infected fields and even the stubble has been or will be burned. The threshing machines that handle the wheat have been disinfected. Finally, no wheat will be grown on the infected areas for several years. It is believed possible that these diseases may have appeared elsewhere but not identified. A sharp lookout will be kept to discover if there are other infected areas besides those already known in Illinois and Indiana.

WINTER WHEAT ADVOCATED FOR WISCONSIN

R. A. Moore, agronomist at the Wisconsin Experimental Station, has come out strongly in favor of winter wheat as against spring in his state. Results of Mr. Moore's observations and experiments have convinced him that the occasional losses in winter wheat from winter killing are less than the losses in the lower yields of spring wheat and the damage by rust.

The two standard winter wheats for Wisconsin, Pedigree No. 2 and Pedigree No. 408, are bred to resist winter killing and ripen early enough to escape the ravages of rust. Early fall seeding is further advised as a precaution against winter killing. A well sprouted plant resists frost.

ARGENTINA UNABLE TO SHIP CORN SURPLUS

In a recent issue of the *Times of Argentina* it was said there appears to be only a small chance that the clearances of corn this season will anywhere approach the quantities available for export, estimated by that paper at 6,000,000 tons (236,000,000 bushels) including old and new crop. Attention is also called to the fact that heavy rains after the harvest have not allowed the bulk of the new crop to get into a condition fit for exporting. It also deplores the fact that pig raising in Argentina is on such a small scale that there will again be a large surplus left at the end of the season. The paper states that there are at present good arrivals of steamers in Argentina and this may result in some future increase in the clearances of corn. Labor troubles on the docks have delayed shipments.

INSURANCE AGAINST STORM DAMAGE

After the Galveston storm of 1915 the courts released all railroads from damage claims for grain on track which was injured by the tidal wave. The present confirmation of exporters at the Gulf ports stipulates that a contract is not completed until the grain is delivered at destination, inspected and weighed, which means delivered in the elevator. As the storage facilities of Galveston are limited, a great burden of responsibility will rest on shippers to that port.

Secretary H. B. Dorsey of the Texas Association, through an insurance agent of Dallas, has arranged for blanket insurance for \$500,000, which may later be increased to \$1,000,000, for members of the Association, covering on each car from the time it leaves the elevator or station, all fire, lightning, tornado, and all transit hazards while in transit to Galveston, and also covers all tidal waves or such storms as have occurred at Galveston or New Orleans, and covers the individual shipments while in transit to Galveston, Texas City, Port Arthur, New Orleans, or in fact any port in America, and covers all these hazards while in any of these ports until the grain is unloaded into the elevator.

The policy is issued to Mr. Dorsey. Those participating report to him when each car is shipped, giving car initial, number, amount of grain loaded and its value. With the receipt of this notice the car is automatically covered, the rate being 12½ cents per \$100 valuation.

A Railway Pneumatic Grain Elevator

Technical Description of a Grain Elevator Used in Siberia During the War Period

JUST before the war broke out the East Ferry-road Engineering Works Company of London, England, delivered to the Vladikavkas Railway Company of Russia a pneumatic grain elevator mounted on railroad trucks and to be used in unloading cars of grain.

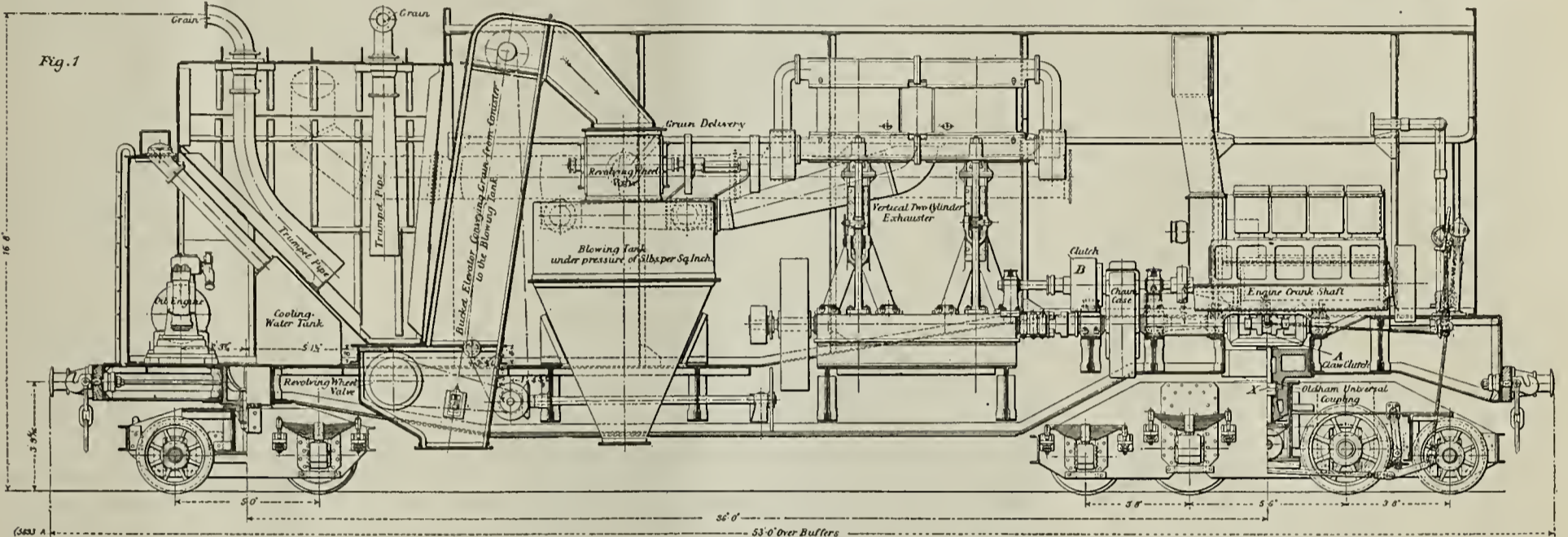
The performance record of this mobile elevator is not available although it is known that it has been

employed; whereas, owing to the restriction of head-room the British installations had to be provided with exhausters of the rotary type, our loading gauge allowing only 13 feet 6 inches from rail level to the top of the truck, while in the Russian installation the distance is 17 feet 1½ inches.

The whole truck with machinery weighs 86 tons. The front end—on right-hand side of illustration—

of the front bogie and the vertical driving spindle. If the plant is to be set in motion the claw clutch A is thrown into gear previous to the clutch B and the travelling gear is disconnected; the clutch, B, can then be engaged.

The exhauster, which comes next, occupies a central position and takes up the greater part of the truck. The cross section, Fig. 3, through the truck, gives an end view of the exhauster. The larger pipe leading from it is the suction pipe, and the smaller one is the compressed air pipe; the blowing tank behind the exhauster is also visible with the air inlet, and just above this pipe (11 feet 5 inches above the ground) is the delivery pipe, from which



SIDE ELEVATION OF RAILROAD PNEUMATIC GRAIN ELEVATOR USED IN SIBERIA

in use. But since that time a number of similar installations have been made for the British Government, so that the plant could be moved quickly to any port where there were no elevator facilities.

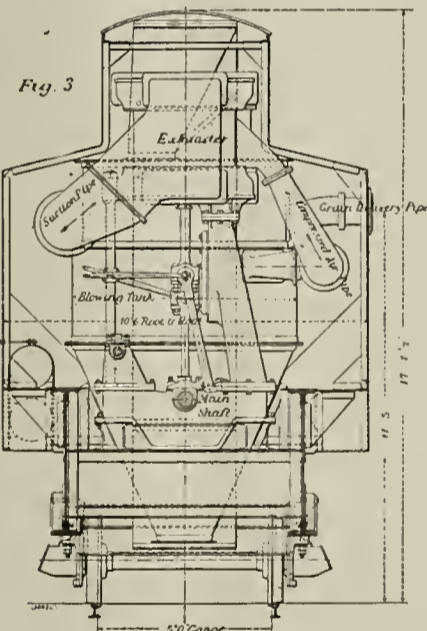
is supported by an eight-wheel bogie, the leading and rear pair of wheels being of the ordinary type, whilst the center pair can be coupled to the engine so that the truck can travel on its own power at the rate of five miles per hour. If the installation is at work, discharging grain, or used as ordinary rolling stock, this driving connection to the front bogie is thrown out of gear. The rear end of the truck rests on a four-wheel bogie, the distance from center to center of bogies being 36 feet. The installation has a capacity of 60 tons per hour when sucking bulk grain from railway trucks and it is capable of blowing the grain a distance of about 100 feet to an elevation of 25 feet.

We will now briefly enumerate the different parts of the plant as shown in the elevation, Fig. 1, and plan, Fig. 2, and two cross sections, Figs. 3 and 4. Beginning at the right hand, or front end, the oil engine occupies the first position and alongside it is a cooler; the engine and the cooler are so situated on the chassis as to balance each other as nearly as possible. The cross section, Fig. 4, gives a view of the engine and its cooler, showing also the oil fuel tank on one side and the silencer on the other; this cross section also shows the clutch by means of which the travelling gear of the truck can be thrown in and out.

In Fig. 1 the upper of the two shafts seen near the front end, is the main engine crank shaft; this is coupled through a friction clutch and a Westing-

house Silent Chain Drive to the main shaft which runs centrally through the railway truck as shown in Figs. 3 and 4. The propelling gear is also seen in Figs. 1 and 4, and the universal coupling at the point X permits of slight motion between the center

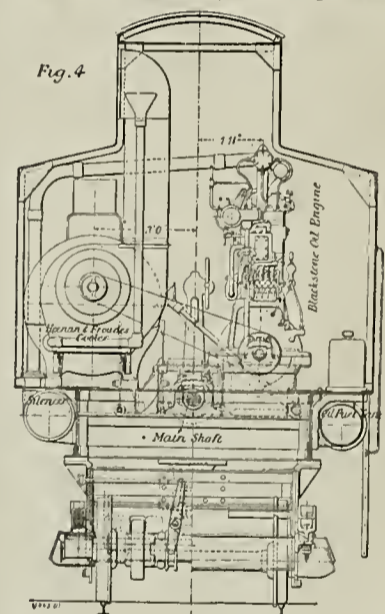
the grain and air can be led a distance of 100 feet by portable pipes. Adjacent to the air pump we have the blowing tank, which is connected to the compressed air pipe



CROSS SECTION WITH END VIEW OF EXHAUSTER

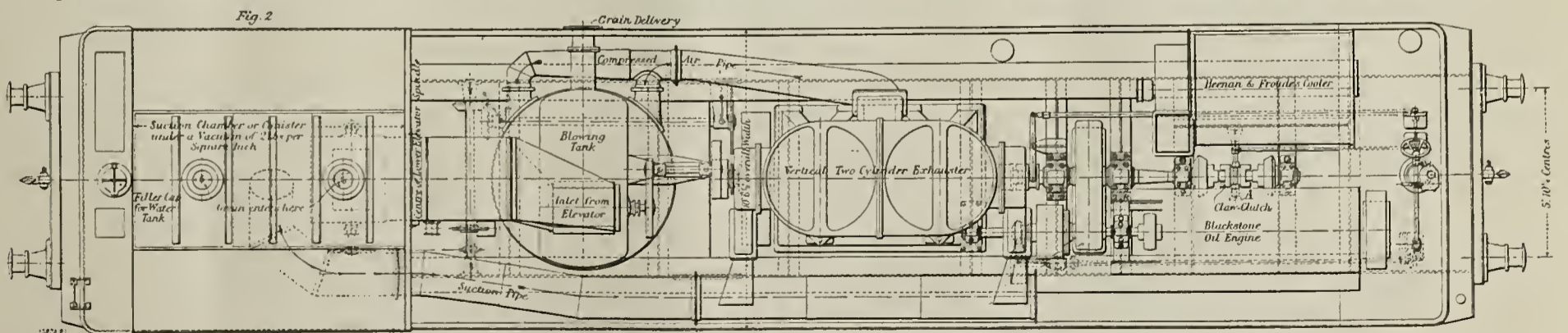
We are indebted to *Engineering* for the following description of the Russian plant.

As will be seen from the illustrations the whole of the plant is housed in one truck 53 feet long



CROSS SECTION OF ENGINE AND COOLER

of the exhauster and which is fitted at the top with a revolving wheel valve through which the grain enters without permitting an escape of compressed air. The blowing tank is also fitted at the bottom with



TOP VIEW OF RAILROAD TRUCK WITH ELEVATOR PARTS INDICATED

over buffers, this being rendered possible owing to the ample height permissible, which, combined with the wider gauge of the Russian railway (5-foot gauge) offered a more favorable proposition. Moreover, in the plant illustrated, vertical exhausters are

house Silent Chain Drive to the main shaft which runs centrally through the railway truck as shown in Figs. 3 and 4. The propelling gear is also seen in Figs. 1 and 4, and the universal coupling at the point X permits of slight motion between the center

a special valve to enable the compressed air to blow the grain out through the delivery pipe previously mentioned above. Next in turn comes a bucket elevator, the receiving end of which is also fitted with a revolving wheel valve, the upper part being in

connection with the suction chamber or canister in which is created a vacuum of about 5 inches. It will thus be clear that the suction and the blowing tank are connected by the elevator, the two terminals of which receive and deliver their charges through revolving wheel valves. The suction-chamber is connected at the upper end to two 6-inch pipes through which the grain enters and is deposited by two trumpet-shaped pipes. The suction pipe, between the canister and exhaustor, is shown in dotted lines as leading from the exhaustor, both in plan and elevation. So far as the grain handling is concerned this practically completes the apparatus.

At the rear end of the truck will be seen a small oil engine which drives at will a small lighting plant, or an auxiliary compressor which is used for starting the main engine. For this latter purpose there are two compressed air cylinders which may be seen in cross section, Fig. 3. Close to this auxiliary engine is the cooling water tank for the circulating pump of the compressor, while above this engine the oil-tank for the same is shown, and the filler cap for the water-tank.

The *modus operandi* is as follows: The exhaust produces a partial vacuum in the suction chamber which causes the grain to enter by two flexible pipes with the usual nozzles at their ends. The grain is delivered by the two trumpet pipes near the base of this chamber and is withdrawn through a revolving wheel valve without destroying the vacuum. After leaving this valve the grain enters a short, fully enclosed bucket elevator, which delivers its load through a similar wheel valve into the top of the blowing tank, the pressure in this chamber is five pounds to the square inch and is sufficient to force the grain out through a pipe into the open (where it is generally delivered underneath a large sheet of tarpaulin), or into the granary.

No dust collectors are required in connection with this plant, and although the Russian wheat we receive in this country is reckoned one of the dirtiest, *i. e.*, containing the greatest percentage of impurities, it is evidently pretty free from dust in the country of its origin, and the impurities are possibly added to bring the percentage up to the allowable limit for export purposes. It will be understood that with the plant under consideration, in which the grain is handled both by suction and compression, these two distinct processes must be carefully synchronised, and to this end the pressure nozzle has an adjustable sleeve similar to the suction nozzle, by means of which its capacity can be regulated. Moreover the capacity of each link in the process is so tuned up as to ensure each successive one being just a trifle larger than that preceding it.

A NEW FIRE HAZARD IN ELEVATORS

A new grain elevator fire hazard has been discovered, says *The National Underwriter*, which may have been responsible for a number of the "unknown origin" fires that have occurred recently.

In a large elevator recently three fires started within five feet of each other, at intervals of one hour. The employe in charge was a man who had been with the company for 20 years and whose record was above reproach. There were various theories concerning the origin of the fires and it was decided to make a detailed investigation. Detectives were employed to come into the plant and work with the man and a complete survey was made of the electrical equipment.

Experiments by electricians developed the fact that the fires were caused by wheat dust collecting on a 16-candle power, 55-volt, ordinary incandescent lamp. The dust ignited from the heat from the globe, fell to the floor and ignited litter lying there. Further experiments showed that the defect may be entirely corrected by the installation of double globes, or in other words, incasing an ordinary globe within a thin glass covering. This modifies sufficiently the intensity of the heat, but does not reduce the light.

THE Canadian *Weekly Bulletin* stated that the Australian Wheat Board has sold 795,573 bushels of wheat to neutral countries at an average price, *f. o. b.*, of \$1.51 per bushel.

The World Wheat Situation

Production, Consumption, Price, Freight and Other Considerations Affecting the World's Wheat Supply

THIS article concludes the review of the World Wheat Situation, the first installment of which appeared last month. It will afford a permanent record for the trade during the most critical period in the world's history. The crop estimates are old but are part of the record.

RELATIVE COST OF FOREIGN WHEAT AT U. S. PORTS AND AT LIVERPOOL

There is given below a table showing cost of foreign wheat at Liverpool and at ports of the United

Table 5.—Relative Cost per Bushel of Foreign Wheat at United States Ports and at Liverpool.

Exporting country	Price of exporting country	Estimated ocean freight	Relative cost
Argentina	1.55*	\$0.72 to U. S. Eastern ports	\$2.27 at U. S. Eastern ports
Australia	1.14	.86 " "	2.00 " "
"	1.14	.72 to U. S. Western ports	1.86 at U. S. Western ports
Argentina	1.55	.40 to Liverpool	1.95 at Liverpool
Australia	1.14	.67 " "	1.81 " "
Canada	2.245	.30 " "	2.545 " "
United States	2.395**	.255 " "	2.655 " "

* Not guaranteed for entire season and subject to change ** No. 1 Northern Spring Wheat at New York.

States, based on the fixed prices and fixed maximum ocean rates (Table 5).

PROBABLE EFFECT OF EXCHANGE ON IMPORTS

Wheat bought in international trade must be paid for in gold or its equivalent. It is therefore important to know the current rates of exchange and how the price of wheat in each country may stand when expressed in terms of gold. This situation is illustrated in Tables 6 and 7.

Table 6.—Equivalents of Foreign Currencies in \$1.00 of United States Gold.

Country	At par	At exchange June 14, 1919
France	5.18 francs	6.42 francs
Italy	5.18 lire	7.90 lire
Germany	4.2 marks	8.55 marks

The average rate of freight and insurance on wheat from the United States to the United Kingdom for the months of January, February, March, and April, 1919, was \$0.2725 per bushel. The average differential to European Atlantic ports would be .25 per cent additional, or \$0.3406 per bushel, and to Mediterranean ports 60 per cent or \$0.436 per bushel over the New York-Liverpool rate. If the wheat were delivered in American vessels, the rate of exchange on the cost of transportation should be included in the cost of the wheat delivered at foreign ports.

It will be noted that the fixed minimum price of wheat in gold is much higher in Italy and France than the fixed minimum sale price of \$2.39½ per bushel at New York, but lower in Germany. It will be seen also that the Governments of France

Table 7.—Comparative Fixed Prices at Par and at Exchange on June 14, 1919, with United States Gold.

Country	Fixed minimum price per bushel of foreign wheat	Fixed minimum price (\$2.39½) per bushel of American wheat at New York in units of foreign currency	
		At par	July 14, 1919 At exchange on
France	20.41 francs = \$3.94	12.41 francs	15.38 francs
Italy	22.43 lire = 4.33	12.41 lire	18.92 lire
Germany	8.82 marks = 2.10	10.06 marks	20.47 marks

and Italy may import American wheat and sell at their fixed minimum price at a profit to the Government in local currency, but at a considerable drain upon their gold reserve.

The fixed minimum sale price of wheat in France amounts to 20.41 francs per bushel, or \$3.94 at par of exchange. The cost of American wheat at French Atlantic ports at the rate of exchange prevailing on June 14, 1919, amounts to approximately 17.62 francs, or \$2.745 per bushel, including the price of \$2.39½ at New York and freight and insurance of \$0.35 per bushel. It is seen therefore that a margin of 2.79 francs or \$0.54 per bushel at par of exchange is left to France for the cost of

interior distribution of American wheat. However, it will be noted that for every bushel of American wheat purchased by France and paid for at the rate of exchange prevailing on June 14, there would be a loss of 2.97 francs per bushel.

Table 7 indicates also that a gold dollar in Germany would buy 2½ times as much domestic wheat as wheat imported from the United States at the rate of exchange on June 14, 1919. This situation will have the effect of inducing Germany and other

countries with a depreciated currency to keep down importations to the lowest possible quantity.

NOTES ON ESTIMATED STOCKS AND EXPORT SURPLUSES FOR THE 1919-20 MARKET

Australia.—Statistics issued by the Australian Wheat Board and published in the *Pastoral Review* of March 15, 1919, show that since the Government took control of the wheat production, 466,462,000 bushels had been received into the Government pools up to March 3 1919. Of this amount, 155,466,000 bushels had been shipped overseas, 115,999,000 bushels were consumed locally, leaving 195,017,000 bushels still on hand and available for export. The amount received into the pools includes 61,335,000 bushels from the 1918-19 crop, which was estimated at 76,000,000 bushels, none of which had been shipped overseas, and only 696,000 bushels of which had been absorbed locally. This would indicate that at least one-third of the accumulated stocks represented new wheat from the yield of 1918-19.

Argentina.—Official statistics published in the "Review of the River Plate" and confirmed by commercial estimates, place the surplus of wheat available for export during the market year 1919-20 at 156,095,000 bushels. (See Reports on Foreign Markets, No. 9, page 7.)

Canada.—Although the wheat crop of Canada for last year was considered a partial failure, the exportations, including wheat and wheat flour, for the year ending March 31, 1919, amounted to 195,082,203 bushels. According to official estimates, the quantity of wheat on hand in the Dominion on March 31, 1919, was 118,543,000 bushels as compared with 77,023,000 bushels at the same date of the previous

year. The area sown to winter wheat for the year 1918-19 is estimated at 840,000 acres as compared with 885,000 acres for the year 1917-18. However, the winter wheat production of Canada is a small portion of the total annual yield, and it has been officially stated by the Department of Agriculture at Ottawa that the acreage sown to spring wheat will bring the total up to approximately 16,958,000 acres, and that conditions on May 31 indicated a yield of 301,000,000 bushels. Therefore Canada may be expected to export a larger quantity than was exported during 1918.

United States.—The Bureau of Crop Estimates on June 14, 1919, estimated the yield of winter and

spring wheat for the season of 1918-19 as 1,236,000,000 bushels, which would provide an export surplus of approximately 636,000 bushels.

Estimated Total Exportable Surplus.—The estimated total exportable surplus of old and new wheat from the principal exporting countries of the world available for 1919 (July, 1919,—June, 1920) may be summarized as follows:

Argentina	bushels	156,095,000
Australia	"	195,017,000
Canada	"	299,543,000
Algeria	"	1,152,000
United States	"	636,000,000

Total wheat for export..... " 1,287,807,000

In this connection it is of interest to know that some of the foremost grain expts of the world have estimated the import requirements of Europe for the season of 1919 at a minimum of 560,000,000 bushels and a maximum of 640,000,000 bushels, and this appears to be in agreement with the estimates of the Inter-Allied Food Commission of from 700,000,000 to 850,000,000 bushels of bread cereals, including both wheat and rye.

It is estimated that the removal of Russia, India, and Roumania from the list of exporting countries reduced the world's export surplus of wheat about 300,000,000 bushels, which is slightly above the figures given in Table 1.

Russia.—The average yearly Russian exports of wheat during the prewar period, as shown in Table 1, amounted to 127,889,000 bushels. Six-sevenths of the supply originated in European Russia, the density of production being in the territory bordering on the Caspian and Black Seas and the water-way valleys of southeastern Russia in Europe. In October, 1917, the number of miles of Russian railways under the Soviet regime was 34,000, and in October, 1918, the mileage in operation had been reduced to 15,000. Owing to the transportation difficulties it may not be possible to market the wheat of southeastern Russia in the central and northern parts of the country, and it is thought possible that a portion of the grain may find an export outlet via the water routes of which there are many in Russia.

According to a report of the American Consul at Vladivostok, dated January 31, 1919, the amount of grain in western Siberia is 237,243,300 bushels, the greater part of which is wheat, and that the exportable surplus will amount to 70,320,000 bushels. Here also, as in European Russia, the disturbed economic conditions, the interference of military operations, and the conditions of transportation may not permit the surplus to reach the markets of China and Japan in competition with the Australian supply. (See Reports on Foreign Markets, No. 2, page 4, "Chinese Market for American Flour.")

India.—Owing to the failure of the last wheat crop, India has become a wheat importing country instead of supplying world markets with 35,042,000 bushels, as in 1918. India has imported from Australia 1,456,000 bushels of wheat, and shipments are now being made on another contract for 4,666,667 bushels for which the Government of the Commonwealth of Australia will furnish the necessary transportation.

TEN YEARS' WHEAT PRICES

The average price of wheat on July 1 of each year for the last decade makes an interesting and variegated story. The prices named are those received by the producer and have been compiled from averages of reports of county crop reporters of the U. S. Agricultural Department in every section of the country.

The average price received for wheat by the producer July 1, 1910, was 95.3 cents; on July 1, 1911, 84.3 cents; July 1, 1912, 99 cents; July 1, 1913, 81.4 cents; on July 1, 1914, 76.9 cents. The lowest price of the decade, therefore, was just before the commencement of the great war. On July 1, 1915, the price was \$1.028; on July 1, 1916, it was 93 cents; on July 1, 1917, it was \$2.201; July 1, 1918, \$2.032; July 1, 1919, \$2.20. The high price in 1919, prior to July, on the first of the month, was May 1, when the price was \$2.311 per bushel.

NEBRASKA ELEVATOR COMBINES OLD AND NEW

There is more in Lincoln than Nebraska state politics. Now Nebraska is preeminently a grain state and its legislature is concerned with laws governing the growing and handling of cereals. And



ELEVATOR OF THE EWART GRAIN COMPANY, LINCOLN, NEB.

no doubt they find inspiration as they look out of the windows of the capitol and see the high peaked roof of the Ewart Grain Company's elevator.

The plant combines the reinforced concrete tank construction of modern design, and the high slant sided cupola which was the most conspicuous feature

from a central station. The power is transmitted by belt drives.

The operating floor is well laid out with every modern convenience, and its direct track on the Burlington Railroad gives splendid shipping facilities.

A HOOSIER HOUSE OF TILE

"Fireproof" is the first word of instruction which most grain firms give to their builders. It was the first consideration of the Marion (Ind.) Co-operative Exchange, and, when completed, the house will be as near fireproof as possible. In many such cases concrete is the answer, but in this case the Exchange decided on Preston-Lansing Vitrified Tile made by the J. M. Preston Company of Lansing, Mich., a building material which has many virtues and which is finding a rapidly growing popularity among builders of grain elevators.

The elevator when completed will have a capacity of 20,000 bushels. There are six circular bins, 10 feet in diameter by 37½ feet high, and two intermediate bins formed by connecting the bin walls with special connector blocks, which form secure and grain-tight joint. One of these bins is divided into four sections of small bins. The two center bins start above the work floor and the entire six bins are topped with a head house built of the Preston-Lansing Straight Block, similar to the warehouse wall shown in the illustration.

A new siding will be constructed running along the front side of elevator and dumping into opening just below the door shown in center bin, while the farmers' scale is located on the opposite side at the extreme end of wareroom; and farmer dump is located where scaffold work shows beyond the six main bins. The smaller bins shown beyond the dump are for the storage of cobs and dust, but are so constructed that they will empty into the main hopper under the farmers' dump and thus can be used for surplus storage. These bins are completed excepting the roof, in the photograph, while the main bins will be 30 feet higher.



PLANT OF THE MARION (IND.) CO-OPERATIVE ELEVATOR COMPANY

of the earliest bulk handling grain storage houses. The effect is striking, as the illustration attests, and the added height affords a splendid advertisement for the firm, which they have taken full advantage of by display lettering.

The house has a capacity of 100,000 bushels with receiving and shipping facilities for handling 15,000 bushels both in and out, per day. It is of concrete construction throughout with commodious work floor and elevator head loft. The storage is divided among 14 bins.

The equipment of the elevator consists of one Eureka Cleaner made by the S. Howes Company of Silver Creek, N. Y., and with a capacity of 6,000 to 8,000 bushels; two Morris Grain Driers with a combined capacity of 400 bushels per hour; power scoop; and a straight track scale.

The power is electric, four motors, taking current

The equipment of the house consists of a 600-bushel Western Corn Sheller in the basement under the main bins; automatic scale and a Monitor Cleaner in the head house; while on the main floor is a 60-bushel attrition mill. A complete dust collecting system is installed, and a bin automatic thermometer system.

The plant is operated by central power electricity. There are two Fairbanks-Morse Motors, with 35 horsepower. The transmission is by belt and gears.

The wareroom is 50x20 feet and is built of the Preston-Lansing Standard Blocks made stright for that purpose. Under the entire wareroom is a basement which will be used for storage. The elevator will have direct connection with the Big Four and Clover Leaf Railways and will soon begin taking grain from the prosperous farms of the community.

ST. LOUIS INVITES YOU



WHEN you get to St. Louis—of course, you are going to the convention of the National Association on October 13, 14 and 15—you will have much to see and hear that will make the trip the best investment of the year.

Many of the grain dealers in the Mississippi Valley are almost as much at home in the city of Anheuser-Busch and George Sisler as they are in their own elevator office. But to those whose travels have not led that way something about this great grain center may be of interest.

ST. LOUIS THE CITY

At present St. Louis claims the honor of being the fourth largest city in the United States. So does the city of Boston, Mass., and Detroit, Mich., and it is necessary to wait until the next official census in 1920 to determine which is right. Within a radius of 500 miles, however, may be found 40,000,000 people, or about two-fifths of the population of the country. Pierre Laclede must have been extremely far-sighted when he chose such a spot for a settlement. Situated where the Missouri River empties into the mighty Mississippi would alone make it a point well adapted to trade and industrial activity, but added to this feature are its advantages of being very nearly the geographical center of the United States and in a territory that, in productivity, is unsurpassed in the country. Primarily a trade center, St. Louis has developed that phase from an \$80,000 fur trade five years after its founding to a trade of over \$1,000,000,000 in 1917.

The factor, however, that has been the most instrumental in building up the city of St. Louis is its unique location. It is in truth what it claims for itself—the largest city completely surrounded by the United States. It is not only a center in itself, but it is a center of centers. Within a

radius of a few hundred miles are to be found the population and geographical centers of the country. The cotton center, center of farm production, the wheat, oat, cattle, lead and zinc, and horse



E. C. ANDREWS
President St. Louis Merchants Exchange

and mule centers and are all also within a few importance in the country.

As a food center St. Louis is favorably situated. The Mississippi Valley in which St. Louis is the principal city, and the great logical central market, is the main producing area of the United

States. Over 70 per cent of the acreage in farms of the entire United States is found in the valley; 69 per cent of the farm values; 76 per cent of the wheat production; 72 per cent of the live stock; 85 per cent of the corn production; 74 per cent of the cattle; 52 per cent of the sheep; and 81 per cent of the hogs. Besides this vast centralization of the country's food production around the largest city on the largest river, there is 70 per cent of the cotton raised in the valley; 55 per cent of the wool is produced here; 69 per cent of the petroleum; 47 per cent of the lumber and 60 per cent of the bituminous coal. St. Louis also has

Although St. Louis is primarily a manufacturing and commercial city, the visitor can not fail to notice its other features. To the east the city pushes itself by four busy bridges, into a railroad, manufacturing and stockyard district. This district, known as East St. Louis, is really a part of the city proper, but for the fact that a state line intervenes. It is, however, the second largest and fastest growing city in the neighboring state of Illinois.

Within the last decade cities have paid increasing attention to their beautification by means of public parks and playgrounds, believing that such things are valuable not only in an aesthetic sense, but that the results therefrom increase the health and efficiency of the city's inhabitants. The parks

ST. LOUIS AS A GRAIN MARKET

There are few shippers or distributors in the central district who have not had dealings with the St. Louis market. Many shippers have held their relationship with the market as a tradition, handed down from their fathers.

Historically, the beginning of St. Louis as a grain market dates back almost three-quarters of a century, it being today amongst the oldest centers of



FIRST VICE-PRESIDENT CHARLES L. NIEMEIER



SECRETARY-TREASURER EUGENE SMITH



SECOND VICE-PRESIDENT F. B. CHAMBERLAIN

its kind in the United States. In reality, the genesis of the organization which is today the Merchants Exchange of St. Louis had its birth in the summer of 1836, when a number of prominent merchants of the city, believing that their mutual interests and business conditions of the city could be benefited and improved, organized a society or debating club for the discussion of matters pertaining to their business and the dissemination of information relating to the trade of the city in general. About 25 of the leading business men of the city were members of the association which was designated as the St. Louis Chamber of Commerce.

The parent organization steadily grew in popularity and members, and from holding meetings once a month it was found necessary for more frequent gatherings, and the meetings were changed to once a week. The Chamber of Commerce, as it was now known, continued to prosper for 10 years or more. Business increased to such an extent that the members conceived the idea of holding meetings in the daytime instead of in the evening, that they might be made of a more practical character and the gathering utilized as a means of bringing buyers and sellers together and thereby facilitating trade.

In the early part of 1849 the milling interests of the city, one of the principal factors in the business of the community, got together and organized themselves into the St. Louis Millers Association; rooms were secured in which they placed tables—such as now designated as sample tables on the grain exchanges throughout the country—pans were provided and persons having wheat, corn, flour, meal and the like for sale were invited to exhibit samples. The idea proved popular from the start and the "Millers Exchange," as it was then called, was soon doing a good business. In the fall of 1849 the merchants of the city, finding that the Millers Exchange was so successful, organized another exchange, rented quarters for meeting purposes, adopted rules and regulations for the government and conduct of business, and on January 2, 1850, held their first meeting. The daily hour of meeting was fixed at 11 to 12 o'clock, except on Sundays and holy days. This was the beginning of what is now known to the grain interests throughout the country as the Merchants Exchange of St. Louis.

The new organization prospered and grew in strength and it was not long until the necessity for more commodious quarters was quite apparent. A new building was erected for the exchange on Main, between Market and Walnut, with a trading hall 80 by 101 feet and a gallery for spectators.

The new building was opened for business June 8, 1857. In its new quarters the exchange prospered greatly until 1862, when the political strife, which rent the country, proved also the disruption of the Exchange. Arrangements were finally concluded whereby the organization was known as the Union Merchants Exchange.

The building on Main Street was the home of the organization until December 21, 1875, when the exchange moved to its present location and the modern history of the Merchants Exchange began.

sion merchants, on the arrival of the boats, would visit the levee in person or with an employee and secure their own samples.

THE MERCHANTS EXCHANGE

The Merchants Exchange of St. Louis is governed by a Board of Directors consisting of 13 members, a president, first and second vice-presidents, and 10 directors. The officers and five directors are elected annually, the former for a one-year term and the latter for a term of two years, thereby five

directors carrying over each year. It is one of the customs of the Exchange that the retiring president be elected to the Board of Directors. The officers and directors serving during 1919 are as follows: President, E. C. Andrews; first vice-president, Charles L. Nie-meier; second vice-president, Frederick B. Chamberlain.

Directors: Roger P. Annan, Albert J. Rogers, Frederick Krey, Louis A. Valier, J. Frank Vincent, John O. Ballard, W. J. Edwards, A. C. Robinson, J. H. Watson and Mason H. Hawpe.

A number of standing committees, appointed by the president, co-operate with the officers and directors in the handling of the affairs of the Exchange. The Exchange maintains a Traffic and a Weighing Department, both of which are most essential and helpful to the members in the conduct of their business. The Traffic Department is under the direction of Charles Rippin, commissioner, with Roger P. Annan, a member of the Board of Directors, as chairman, while the Department of Supervision of Weights is under the management of John Dower, supervisor, with J. Frank Vincent, also a member of the Board of Directors, as chairman.

DEPARTMENT OF SUPERVISION OF WEIGHTS

The Merchants Exchange about 18 years ago, recognizing the necessity for weight supervision, established, in addition to its other trade auxiliaries, a department for the purpose of supervising the weighing of grain coming to the St. Louis market, and during

these intervening years its record has been such that it needs no commendation or introduction to the grain trade. A retrospect of the past, however, will be apropos at this time. Starting as it did from an humble beginning with a nucleus of 10 or 12 men and laboring for several years under the vicissitudes and restrictions incident to work of the kind, it has achieved results far greater than was anticipated by its most sanguine supporters, and it is gratifying to note that the organization has advanced until now it occupies a place in the front and ranks with leading terminal market depart-



A CANYON IN THE ST. LOUIS BUSINESS DISTRICT

The trading hall of the Exchange is one of the most commodious of its kind in the United States, having a floor area of 100 by 225 feet, unbroken by columns of any kind, the ceiling rising to 80 feet from the floor, being supported entirely by steel trusses on the walls.

In the early days of the Exchange everything came and went by river. For half a mile or so along the river front freight was piled high in rows as it was unloaded from the boats or delivered for shipment. Consignments of wheat, corn and the like for St. Louis were stacked high and the commis-

ments of the country. The conflict between the state officials and the Exchange department, while it resulted in the state being given authority to weigh grain in all public elevators in the state, resulted in great good for the Exchange, as the suit, which was carried to the U. S. Supreme Court brought out a wealth of testimony relative to the efficiency of the Exchange service and the general satisfaction which that service gave, a direct result of the policy of fairness to all adopted by the Department of Supervision of Weights at its inception.

The development of this branch of the service has been rapid, and it can be said that, like the proverbial acorn, it has grown and spread out to such an extent it is now recognized as one of the permanent fixtures in the commercial life of the Merchants Exchange and the city of St. Louis. Experience has demonstrated that the Exchange, although spending large sums of money in excess of revenue received for the proper maintenance of the department, has benefited largely in a business way, and also by the satisfaction that the accuracy and integrity of Merchants Exchange weights are never questioned.

The policy of the organization always has been to conserve alike the interest of buyer and seller, and a strict adherence to this fundamental principle has inspired the confidence of

those who ship to and from our market to such an extent that the work of the department is considered as having a maximum of efficiency.

The Merchants Exchange Department of Weights is more than the name implies, as its work extends beyond the elevators and industries out into the railroad yards in many directions, and its service, while primarily for the benefit of the shipper who is

3,000 tariffs on file, which are kept up to date, and all changes that are made in supplements or reissues of tariffs are carefully examined when received, to determine how such changes may affect the market. These tariffs are used daily in quoting rates to members both for in-bound and out-bound shipments. On in-bound shipments the rates charged on the freight bills are checked to see that no overcharge occurs in the transportation from the country to the market. The out-bound quotations are made to members to enable them to offer grain for sale at various points of consumption where there may be a demand. The department is frequently called upon for 100 quotations or more per day, in addition to which the members often

having co-operated from the beginning with the New Orleans Board of Trade and other interested parties to bring about restoration of river service.

AWAKENING OF THE MISSISSIPPI VALLEY

With the transportation difficulties growing out of the congestion of war business, the interest in water transportation has received a tremendous impetus, and particularly on the Mississippi.

For thirty years, beginning in 1873 and ending in 1903, there was boat transportation on the river for bulk grain from St. Louis to New Orleans, and the elevators located on the river did a thriving business, but gradually this business disappeared from the river and went to the railroads, owing to the railroads making lower rates on the freight that

was water competitive in order to secure it, instead of letting the boat have it; thus the boats died of inanition. Then there was a long period of sleep in the Mississippi Valley, so far as river transportation was concerned, but when the acute car shortage manifested itself after the opening of the European War, because of the great commerce that wanted to be moved between points in the U. S. and to points abroad, it dawned on the people of the Mississippi Valley that if they had their boat transportation restored on the Mississippi River they could help themselves without depending upon

the railroads for cars or other facilities so far as the haul between points reached by the Mississippi River was concerned. Thereupon they had many conference with their Congressmen and Senators and finally had a grand gathering of the Mississippi Valley Boosters in Washington during the summer of 1917. The people of the Valley decided to concentrate their efforts toward securing



SOLDAN HIGH SCHOOL, ST. LOUIS

file lists of points from and to which rates are wanted, involving several hundred rates at a time. If any rates appear to operate unjustly against the market, a thorough study is made of the situation involved and action is inaugurated with the interested railroads or freight rate committees to bring about correction. Sometimes there are differences of opinion between the Exchange and the railroads



PORTLAND PLACE, A TYPICAL RESIDENCE STREET

hundreds of miles away, is equally as beneficial to the buyers and carriers to the extent that they get accurate reports and properly supervised weights of all grain and hay unloaded under the department's supervision.

TRAFFIC DEPARTMENT

The Merchants Exchange of St. Louis has maintained a Traffic Department for the use and benefit of its members during a period of about 20 years. This department is charged with the responsibility of watching the rate adjustments and transportation matters which might affect the interest of the St. Louis grain market and milling center. It undertakes to keep that market in line with other markets in the matter of freight rates, as well as other transportation practices. The department has about

as to the justice of its request, in which event the matter is handled with the Interstate Commerce Commission.

The Merchants Exchange is a member of the National Industrial Traffic League, an organization which consists of the principal shipping organizations and firms in the country, having a total of about 700 members. This league handles all matters of general interest to the shipping public for the benefit of its membership and undertakes to protect the shippers' interest in the matter of legislation and other policies affecting transportation matters in a national way.

The Merchants Exchange was instrumental in getting boat service established on the Mississippi from St. Louis to New Orleans and intermediate points,



A CORNER ON KINGSHIGHWAY, ST. LOUIS

transportation on that section of the river between St. Louis and New Orleans, especially because that had formerly been used successfully in transportation of goods between St. Louis, New Orleans and intermediate points. The result of this combined action, and particularly the championship of their cause by their Representatives and Senators, led by Senator Reed of Missouri, who made a brilliant presentation of the whole situation before the two Interstate Commerce Commissioners delegated by Director General of Railroads McAdoo to hear the testimony and make recommendations, was a positive statement of the Commissioners to Mr. McAdoo that there was a public necessity for such service being put upon the river and accordingly they recommended and he authorized the building of a boat

line for transportation on the Mississippi River adequate to take care of the business that was in the Valley seeking that service.

A fleet to cost about \$8,000,000 was thereupon put in course of construction. It will consist of 7 tow-boats and 40 barges, the latter of 2,000 tons carrying capacity each, and be able to carry about 800,000 tons south-bound and 400,000 tons north-bound per annum at rates substantially lower than all rail rates between the same points. The first barge is now ready for service and others will follow at intervals of a few weeks. The entire fleet will be ready for operation in the spring of 1920 but a part will be operated this fall. Half of the south-bound tonnage is expected to be grain and grain products, the other half will be merchandise and manufactured goods. As this line will carry cheaper than the railroads

it will attract additional grain to St. Louis for transportation from St. Louis down the river to Memphis, Vicksburg, Baton Rouge and New Orleans, particularly export grain to the latter point. There are elevator facilities now existing and additional facilities to be constructed to take care of the grain tonnage that the boat line will handle.

The bulk grain is poured direct from the elevators through the river houses to the barges moored in the river and upon arrival at New Orleans it is drawn out of the barges by means of spouts that lead from the barges to the elevators located on the water front at New Orleans. There it is held awaiting arrival of the ocean going vessels going to foreign countries. This method of handling grain involves very little manual labor and therefore the transportation cost is low compared with other classes of freight that require handling on which very heavy terminal charges are necessarily incurred. While waiting for the permanent fleet, described above, to be constructed, the Government has rigged up a temporary fleet consisting of old equipment that was available on the river and has carried grain, flour and general merchandise south-bound to the full capacity of the temporary fleet besides carrying north-bound goods, such as sugar, coffee and oil. The business developed so rapidly that the temporary fleet was unable to handle all that was offered. It is expected in a reasonable time after the permanent fleet has been in operation that the traffic will show a substantial profit, thus enabling the investment to be returned to the Government.

In the past it has been difficult, if not impossible, for boat lines to compete with the railroads owing to the fact that the roads were allowed to reduce the rates on the water competitive business to such an extent that the boats could not profitably handle, while maintaining much higher rates to points on the roads not competitive with the river. This

caused much dissatisfaction at the interior railroad points where much higher charges were made. The Government has announced that it will protect the boat line against that form of competition in the future and enable the river to take the traffic that can be handled most economically that way. This opens a new era in transportation through the Mississippi Valley which is being watched with

27,271,340 bushels; rye 286,820 bushels and barley 480,680 bushels. Of the outgoing movement 12,414,350 bushels of wheat 2,235,189 bushels of corn, and 4,005,139 bushels of oats were exported to foreign countries.

A feature among the grain centers of the country, and to which St. Louis, as a market, can lay claim to, is that of a market for soft red winter wheat. For more than a half century it has held this distinction and controls the marketing of almost the entire production of this grade of wheat. Millers, and others, in all sections of the country, who want soft red winter wheat, look to St. Louis for the major portion, if not all, of their supplies.

Allied with the grain trade of the city, and one which has long been a big factor, is that of the milling industry. Annually the production of flour by

local mills, or by interests controlled by St. Louis, aggregates up into the millions of barrels, thereby each year, using for local consumption many millions of bushels of grain which comes to this market. St. Louis mills not only enjoy an excellent domestic business, but annually large quantities are exported to European and South American countries. The amount of flour manufactured by the local mills in 1918 amounted to 1,398,283 barrels, and by mills outside of St. Louis, but owned by St. Louisians, 1,954,930 barrels. There was received 2,965,320 barrels of flour, with shipments aggregating 3,951,120 barrels. Of the flour shipments 508,485 barrels were taken for export.

Another feature of the St. Louis market, that is worthy of attention, is the production of mixed feeds for poultry and cattle. The industry the past decade or two has developed into wonderful proportions until there are now upward of a dozen plants, some of which are among the largest of their kind in the country.

St. Louis ranks high among the great receiving and distributing centers of the country. Its position is ideal as a shipping point for not only the great South and Southwestern country but likewise for the East. Its proximity to the great agricultural region, wherein are grown the great surplus crops of wheat, corn, oats and other cereals, makes it one of the foremost of the great grain receiving marts. As the great bulk of grain for shipping purposes is grown North, Northwest, and West of St. Louis and the greatest consumption is South, Southeast and East of St. Louis, it can readily

be seen that owing to the transportation facilities, both rail and water, the grain carrying lines from the West terminating at St. Louis, the large systems to the South, South-east and East starting at St. Louis, the city is located in the line of least resistance for transportation purposes. Therefore why should not St. Louis be the growing grain market of the country? Whatever changes await the great grain routes of the country will un-



JEFFERSON MEMORIAL BUILDING

much interest by all the communities along and adjacent to the river. The river has been given a new chance to live and to demonstrate its value as a transportation agency.

ST. LOUIS AS A PRIMARY GRAIN MARKET

Of the primary grain centers of the United States St. Louis holds third place, being surpassed only by Chicago and Minneapolis in point of the quantity of grain handled.

Each year the annual handling of grain of all kinds through the St. Louis gateway aggregates in round figures upward of 100,000,000 bushels. Its receipts, under normal conditions, come from Missouri, Illinois, Iowa, Kansas, Nebraska, Minnesota, the Dakotas and many other states, while its shipments are destined for points not alone throughout the South, Southeastern and Southwestern States,



BROADWAY LOOKING NORTH FROM MARKET STREET
View of Courthouse Steps from Which Slaves Were Sold in Early Days

but to the Gulf and Seaboard points for export.

In 1918 the total number of bushels of the five principal grains received amounted to 97,647,660 bushels of which 37,731,818 bushels was wheat; 25,707,161 bushels corn; 32,884,465 bushels oats; 418,330 bushels rye and 905,883 bushels barley. The aggregate shipments for the like period was 65,693,600 bushels divided as follows: Wheat 21,065,500 bushels; corn 16,589,260 bushels; oats

doubtedly depend largely upon the success of the rehabilitated river traffic. As merchants of the entire Valley and many strong organizations are behind the movement, it stands a fairer chance than it has since the railroads put their quietus upon it. Then indeed will St. Louis come into her own.

THE CONVENTION PROGRAM

The convention program promises to be the most spectacular in the history of the Association. Already many speakers of international promise have promised to address the convention.



MARSHALL HALL
General Chairman Convention Committees

Among these is Julius H. Barnes, who will take this opportunity to address not only the grain dealers, but the entire country on the present state of world conditions so far as food supplies and demands are concerned. This address will be the authoritative utterance of the Grain Corporation and the whole world will be waiting for it.

The Hon. David R. Francis, American Ambassador to Russia, will tell all about the revolution in that country. Volumes have been written about Lenine and Trotsky, the Russian Red Guard, the

reign of terror, and the efforts of the Bolsheviks to impose their crazy cult on 180,000,000 people. Ambassador Francis knows the inside story and will tell it to you.

Hon. E. E. Clark, of the Interstate Commerce Commission, will be on the program and will have a message on the railroad situation. Nothing could be more timely than this address, when the whole country is discussing the Plumb plan to take over the railroads and run them in the interests of the brotherhoods.

J. W. Shorthill, secretary of the National Council of Farmers Co-operative Associations, will also address the convention. Mr. Shorthill is one of the ablest men in the co-operative movement and his speech is sure to be both timely and interesting in view of the extreme radicalism that has developed in North Dakota and threatens to spread to other grain producing states.

Governor James P. Goodrich of Indiana will discuss reconstruction problems and Dean Charles F. Curtiss will discourse on problems that are of vital interest to agriculture and the grain men. Professor Curtiss is director of the Iowa Agricultural

Experiment Station, and he is also president of the International Live Stock Exposition. This is the third time that Governor Goodrich has been on the National convention program. Severe illness on the first occasion and an automobile accident last year prevented his appearance, but this year we will surely hear one of the ablest of our state executives.

ENTERTAINMENT

The St. Louis Committee which has in charge the execution of convention affairs and the entertainment of the guests to the city, is headed by Marshall Hall, assisted by E. C. Andrews, Roger P. Annan, Charles L. Niemeier, and Aderton Samuel.

Mr. Samuel will take care of the entertainment, working with John O. Ballard and Geo. F. Powell.

Charles Niemeier heads the Speakers Committee, with Frederick B. Chamberlain, Joseph T. Newell, Eugene Smith and Wm. J. Niergarth.

The Finance Committee consists of Roger P. Annan, Fred W. Seele, J. H. Watson, Julius J. Albrecht, and Logan M. Baxter.

The headquarters of the convention will be the Planters Hotel, and there the meetings will be held.



ELEVATOR OF POWELL & O'ROURKE GRAIN COMPANY, ST. LOUIS



CENTRAL "B" ELEVATOR, OWNED AND OPERATED BY THE J. H. TEASDALE COMMISSION COMPANY, ST. LOUIS

Moisture is the Cause of Corn Spoiling

Preliminary Report of Experiments Conducted at the Kentucky
Agricultural Experiment Station

By J. S. McHARGUE

THE farmer, the grain elevator man and the exporter of corn each suffers severe losses occasioned by the heating, souring and molding of corn while in storage in bins or in transit in cars and ships. That the underlying causes are not well understood by those engaged in the commerce of this grain is evident from the fact that every year thousands of tons are lost and many and divers reasons are given for its deterioration and spoiling.

At the Kentucky Agricultural Experiment Station an investigation was begun about a year ago, the object of which was to determine more definitely the chief cause or causes responsible for the deterioration and spoiling of grain corn and corn meal. Thus far our experiments have been confined to the laboratory and were carried out on rather small samples, 1000 grams (about 2¼ pounds) constituting a sample in most of the experiments. The results obtained up to this time appear to be of sufficient importance to justify a few preliminary statements concerning what our experiments prove to be the chief cause of the spoiling of corn.

Everyone knows that any grain containing enough moisture to be classed as damp or wet, by mere observation or touch, cannot be stored with safety, even in small quantities, so long as it retains the excess of moisture. If however, the moisture content is not discernable by the senses it becomes largely a matter of experience or good judgment upon the part of those handling the grain as to whether it will keep if stored in quantity. At grain terminals methods are usually provided for the determination of the moisture content of corn. With the farmer this is out of the question and he is compelled to send a sample of his grain away to where moisture tests are made or to risk his judgment as to whether or not his corn will keep in storage. If the quantity of grain be small his experience and good judgment can be usually relied upon. If, however, the quantity is large, a guess at the moisture content becomes a dangerous risk. The records show that the loss to shippers, in four months of one year, on corn arriving in the Chicago market, amounted to \$4,000,000. This loss was due to the grain containing too much moisture and deteriorating in transit. Had the grain been dried to 12 per cent of moisture, the saving on freight alone would have amounted to more than \$100,000, and the use of 600 box cars would have been obviated. Inasmuch as much of the spoiled corn probably was fed to live stock and the consumption of such grain often causes sickness and sometimes death among the animals eating it, it is possible that an additional saving to the live stock industry would have resulted.

We are told that wheat in a perfectly sound condition has been removed from the caskets of Egyptian mummies, after having been buried for a thousand years or more. If this is true of wheat, it is quite possible that corn would have stood the test equally well. If there is any basis of fact in regard to the wheat found with the Egyptian mummies, it teaches a good lesson for the grain dealer; namely, to keep the grain dry.

Our experiments show that the chief cause of the deterioration and spoiling of corn is due to the fact that it has never been thoroughly air-dry (12 per cent of moisture) or, if it was, it has not been kept at this stage of dryness. One very important property of air-dry corn is usually not taken into consideration by those engaged in its commerce. Air-dry corn exhibits hygroscopic properties; that is, it will absorb moisture from the atmosphere. A sample of air-dry corn containing 12 per cent of moisture was carefully weighed and then placed in a moist atmosphere. At the end of 24 hours its moisture content had increased to approximately 13 per cent; after 48 hours, to 13.5 per cent; after 72 hours, 14 per cent; and after 16 days

it had increased to 16.7 per cent. Or, in other words, corn that contained only 12 pounds of water in each 100 pounds of grain had increased its moisture content to 16.7 pounds of water to each 100 pounds of grain on being exposed to a moist atmosphere and at room temperature for 16 days. Molds began to develop in the meantime and the corn evolved a musty odor. The molds brought about a rapid deterioration in the sugars, starch and oil contained in the germ and caused a marked increase in the acidity of the corn.

In another experiment, enough distilled water was added to three 1000-gram samples of corn containing 12 per cent of moisture to make a moisture content of 15, 20 and 25 per cent, respectively, and each of the samples was placed in a glass jar and sealed air-tight. The jars were allowed to remain at room temperature, which was about 25° C., for 10 days. At the end of this time the jars were opened, to note if there was any evidence of deterioration. It was noted that, in the jars containing 20 and 25 per cent of moisture, fermentation processes were under way and the corn evolved a slight sourish odor. The jar containing the corn with a moisture content of 15 per cent did not evolve a sour odor at this time but after a period of 20 days it did show signs of deterioration due to molds which gradually increased with the prolongation of the experiment.

At the end of 30 days the samples 15, 20 and 25 per cent of moisture had an acidity of 23, 30 and 50 cc. of normal sodium hydroxid, respectively, per kilogram of the corn, whereas the original corn with 12 per cent of moisture had an acidity of only 18 cc. of normal alkali per kilo. Doubtless heating would have been observed with the samples containing 20 and 25 per cent of moisture, had much larger quantities of corn been subjected to the same conditions. Since the samples were small, the heat was dissipated as fast as produced. After standing at room temperature for 60 days, the condition of the corn in each of the jars may have been described as follows: 15 per cent of moisture, evidence of deterioration by molds, musty odor; 20 per cent of moisture, damaged, considerable change in color, sour odor; 25 per cent of moisture, badly damaged, sour odor and of a dark color.

It is believed that the experiments just described are typical of what takes place when corn deteriorates and spoils in storage in bins, cars and ship lots, the only difference being that where the quantity of corn is large, heating will occur more quickly and the deteriorating processes will be accelerated to a corresponding degree.

The factors other than excess of moisture which are responsible for the deterioration and spoiling of corn are enzymes within the grain, molds and bacteria. Sound corn contains amylolytic, proteolytic and lipoclastic enzymes, the functions of which are to digest by hydrolysis and bring the reserve food material contained in the grain in the form of sugars, starches, fats and proteins into a suitable condition for assimilation by the young embryo contained in the germ. Whenever sound corn is subjected to the proper conditions of moisture, heat and oxygen, life processes begin to develop and the enzymes begin to do their work. If the supply of oxygen is limited, the enzymes cannot carry out their normal functions and the life processes are arrested, except in parts where air has access. For this reason corn will sprout on the top layers of spoiled corn, whereas that beneath will have undergone changes brought about by heating, molds or fermentation. Mold spores, which are always present on corn and in the air everywhere, unless special means have been taken to eliminate them, apparently require less moisture for their development than that which is necessary for fermentation processes. Hence moist corn may only mold, under certain conditions, and not ferment. Molds

secrete, during their growth, practically all of the hydrolyzing enzymes and thereby bring about rapid deterioration changes in the fats, sugars, starches and proteins contained in the germ and other parts of the corn grain.

Large quantities of corn intended for export trade are stored in large elevator bins and such corn usually has been dried to contain 14 per cent of moisture. So long as it remains in the bins there is little danger of its heating or fermenting, provided it does not acquire more moisture. Whenever 14 per cent corn is subjected to slow processes of loading, unloading and transportation in cars or ships that are not air and water tight, there is always danger of enough moisture filtering in to increase the moisture content, on the top surface at least, to start the growth of molds and, possibly, fermentation, under favorable conditions of temperature. The sweating that occurs within steel vessels can be avoided by first having the ships' hold absolutely dry before the corn is placed within and the corn should not contain more than 12 per cent of moisture, and the hold should be kept absolutely air and water tight during the voyage. It appears that such precautions are absolutely necessary for the transportation of corn in a sound condition to European ports.

What has been said of corn also applies in a general way to corn meal intended for domestic consumption. Meal made from corn containing 12 per cent of moisture will absorb more moisture when exposed to a moist atmosphere. The oil contained in whole corn meal will, when exposed to the air, absorb oxygen and hydrolysis of the fatty glycerides takes place, and as a result the acidity of the oil increases. If meal made from whole corn containing no more than 12 per cent of moisture is kept in air-tight containers, its fresh, nutty odor will be maintained for a considerable length of time while, on the other hand, if the meal be exposed to atmospheric conditions the sweet, nutty odor characteristic of fresh meal will soon disappear. Meal that has had most of its moisture removed (3.5 per cent) undergoes very little change so long as it is maintained at this state of dryness. In an experiment, one sample of meal made from whole corn was placed under a bell jar with another vessel containing concentrated sulphuric acid, for the purpose of removing as much of the moisture contained in the meal as possible. After remaining under the bell jar by the side of the sulphuric acid for several months a moisture determination was made and it was found that the meal contained only 3.5 per cent of moisture. The sample was then transferred to a dry container and made air tight and kept in this condition for six months, during which time the acidity of the meal did not increase to an appreciable extent, thus indicating that when the moisture content is reduced to a very low percentage, the hydrolysis of the fatty glycerides is completely arrested. However, if meal made from whole corn containing no more than about 12 per cent of moisture is protected from absorbing more moisture and from the action of the oxygen contained in the atmosphere, it can be preserved in a condition suitable for human consumption for from four to six months at least.

It is a difficult matter to determine just how much of the deterioration in corn is due to molds and how much is due to the action of bacteria. It may be assumed, however, that the molds are more active in the initial stages of the deterioration where molds develop and that bacteria carry on the deteriorating changes more nearly to complete destruction.

It therefore appears from our experiments that the one chief cause of the deterioration and spoiling of corn and corn meal is *excess of moisture*. The subsidiary factors, molds, bacteria and enzymes, are completely held in check so long as the moisture content does not much exceed 12 per cent.

AN amendment has been added to the State Grain Grading, Inspection and Warehousing Law of Montana whereby a fee of \$15 for each elevator operated by a company is required. The original bill provided for a \$15 fee for all elevator companies. This will increase considerably the tax of companies operating more than one elevator.



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ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching persons connected with this trade. Advertising rates made known upon application.

CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

Official Paper of the Grain Dealers' National Association and of the Illinois Grain Dealers' Association.

CHICAGO, ILL., SEPTEMBER 15, 1919

A MOVEMENT TO BE WATCHED

TENANTRY is a problem which intimately concerns the grain trade because of its effect on fertility and production. A new angle to the land problem has arisen in England which may cure tenantry, but which may result in a condition that is worse. There are parallel cases in this country, but the comparatively limited acreage of England gives it greater prominence there.

In 1917 the Tenant Company, Ltd., secured a few farms in Norfolk and worked them on a joint stock ownership basis. The land was purchased at an average of \$73 per acre and under careful management has been improved until it is now worth about \$122 per acre. This has been done by rotation and fertilization. Taking this successful undertaking as a hint, the Commercial Bank of London has just secured title to 19,000 acres in Lincolnshire, said to be among the most highly cultivated in England, and for which about \$500 per acre, or approximately \$10,000,000, was paid. Other interests linked up with the farms are included and the whole will be controlled by a single joint stock company or corporation.

Under this plan, agriculture may flourish and farm land improve and be more profitable, but carried to its logical conclusion, it would tend to create a practical monopoly in land by a few, probably interlocking, corporations. The stock of these corporations may be distributed widely, the control will be limited to a few.

No agricultural movement in the world's history was surrounded by more dangerous possibilities than this. When all the land was so organized, nature herself would con-

THE AMERICAN ELEVATOR AND GRAIN TRADE

Thirty-Eighth Year

spire to freeze out the small holders. A crop failure would, perhaps, shut off the sole income of hundreds of investors and the stock market for the securities would see to it that the insiders were not cheated. Can you imagine a country whose land was monopolized by a few men? It would be no country at all, just a big factory. We believe that the English people are too essentially democratic to allow such a movement to grow, for, after all is said, it is the small individual landholder, not stockholder, who constitutes the safe, sane, patriotic and dependable citizen.

LOW GRADE WHEAT PRICES

UNDER pressure of Northwestern farmers backed by Dr. Ladd, the Grain Corporation has fixed prices for low grade wheats. No. 4 is 4 cents under No. 3; No. 5 is 4 cents under No. 4. A discount of 3 cents per pound for deficiency in weight is made for all wheat otherwise conforming to the specifications of No. 5 or better. This price regulation is quite certain to put on the market a large quantity of low grade wheat which is too poor for milling unless in exceptionally equipped mills, and which is dangerous to handle because of its high moisture content and damage allowance. The price fixed for the low grades is higher than most millers will care to pay.

The allowance for light weight is 3 cents per bushel. The difference in weight between No. 1 and No. 5 hard winter is nine pounds. This alone would scale the low grade 27 cents under No. 1, whereas the spread allowed is but 14 cents. Furthermore No. 5 may be musty and slightly sour, a condition which no mill would be willing to tolerate. The moisture content may be 15.5 per cent in the low grade. The government maximum for flour is 13.5 per cent. All of these factors put a premium on the low grades at present prices. No doubt, Dr. Ladd of North Dakota, is ready to prove that the discounts are too great, but Dr. Ladd's experimental mill grinds out more politics than scientific information.

PROFITABLE EXPANSION

THE country elevator which confines its whole endeavor to handling grain is handicapped. As a buyer it is continually under suspicion of the farmer and is too often regarded as an evil which must be borne rather than as a friendly aid. But when the elevator becomes a local seller, it takes on a new importance in the community. It is easier to understand the motives of a person who wants to sell than of one who only buys. The merchant is held in regard, the grain buyer is not always loved. In addition, three idle months decrease the efficiency of the plant 25 per cent, and there are few business ventures which can or should stand this drain.

In putting in a sideline, however, many factors should be carefully considered. The sideline should, so far as possible, fill in the off season of grain; it should be handled by the regular elevator force so that the organization can be sustained the year round; it

should be a commodity which farmers need; it should be profitable in itself; it should be something which you can sell to yourself before you try to dispose of it to others, in other words, a commodity in which you have faith.

Some men find it easier to buy than to sell. This should not be overlooked. It might necessitate hiring an extra man for the job, and it would take considerable business to warrant that expense. Many men take on an inferior line of goods because there is a larger margin of profit. This is a short-sighted policy, for your merchandise will reflect upon your standing as a grain merchant.

The most successful sidelines for elevators have been: Lumber and coal, for the railroad and plant facilities lend themselves naturally to these lines; feed, as most farmers need more or less during the year and they can carry it back with them when they deliver their grain; cement, as concrete is used more and more on all farms; fertilizer; seed; fence posts; tile, and building material. Few plants could handle all of these successfully, and when a choice is made the requirements and possibilities of the community should be canvassed carefully. A prosperous grain business may be seriously injured by an injudicious selection of sidelines; but the most prosperous plant would be enhanced in value if the right sidelines were carried as an adjunct to the business.

FEAR AND FERTILIZER

THE fear that some untoward legislation may be enacted to reduce the cost of living at the expense of the farmer seems to have taken a firm hold of many grain growers. It is shown in their hesitancy in planting bread grains, but more especially in the apparent disinclination to spend money on seed treatment and fertilizer. During the war, fertilizer was high and difficult to obtain. Now, however, there is plenty of it and it is less expensive and will be more so. Wheat will not be cheap next year, compared with pre-war prices, although the foreign demand will not be more than normal unless there is a crop failure in Europe. The general price level in this country is fixed at a high point, which will not regain or even approach normal for some time. Wheat will reflect this high level and will be profitable to raise. Increasing the yield per acre will not lessen the profit.

During the past two years more dependence has been placed in acreage than in yield, but now the thoughtful farmer must know that, as we approach competitive conditions again, science will conquer mere bulk. Now, if agricultural science has demonstrated one thing more than another, it is that fertilization brings immediate and enormous returns. No farm investment pays better dividends, and yet farmers are holding back and refusing to buy and use it.

This is a field in which every elevator should be a focal point in arousing interest in the benefits of fertilizer. Every patron should be urged to use it and every elevator should be a distributing agency. The returns to the elevator are far more than in the

profit on the sale. It means more grain to handle next year.

There is a marked tendency among farmers to sell off breeding stock. This will decrease natural fertilizer and increase the demand for the commercial brands, of which there are many good ones on the market.

THOSE SIDE TRACK AGREEMENTS

UNTIL the Government decides what it is going to do with the railroads the transportation of the country is marking time, getting through its routine work, but providing in no way for the future. The question is a long way from settlement but should have immediate attention at Washington as soon as the peace treaty is disposed of.

In the meantime the Railroad Administration has been reluctant about entering new orders or amending old ones. However, under pressure of countless appeals and the earnest solicitation of Mr. Goemann's Transportation Committee, Supplement No. 2 to General Order No. 15 has been issued, which temporarily, will satisfy those shippers who have been hounded by the railroads to enter into written contracts covering the liability of sidetrack maintenance. This supplementary order, so far as it effects the sidetrack agreement controversy is as follows:

"2. Where existing industry tracks are not covered by written contracts, they shall be maintained and operated in accordance with the provisions stated in paragraph (1) hereof. In the absence of a written contract as to the maintenance of an industry track constructed prior to March 26, 1918, the practice of the connecting carrier prior to Federal control, as applied to such track of any particular industry from the beginning of its use by such industry, shall be considered as equivalent to a written contract in accordance with such practice."

This does not settle the question as to whether or not a railroad may lawfully contract for exemption from liability, the real principle at stake, but it does tell the railroad managers to lay off.

MR. BARNES IS VINDICATED

RUST, blight, drought and scab conspired to help Mr. Barnes and Mr. Hoover out of a hole. When our wheat crop was confidently expected to reach a billion and a quarter bushels, Mr. Barnes stated that \$2.26 was a fair price. It is still a fair price because, although Mr. Barnes estimated correctly the world's ability to absorb that enormous surplus, he did not guess right as to Europe's poverty, the depreciation of foreign exchange and the willingness of Europeans to substitute other foodstuffs rather than pay our price. Most of the foreign governments have fixed a wheat price for the benefit of home growers about on a par with our price, difference in exchange considered, but their imports will be the minimum required, not the maximum that could be consumed or held in reserve. So we find our present estimate of 923,000,000 bushels of wheat of no greater value per bushel than the 1,161,000,000 bushels estimated in July.

Winter wheat stayed at 715,000,000 bushels during the month, but spring wheat lost 17,000,000, being now estimated at 208,000,000

bushels, according to the Government September crop report; corn gained 71,000,000, the present figure being 2,858,000,000 bushels. This beats the 5-year average by over 100,000,000. Oats decreased during the month from 1,266,000,000 to 1,225,000,000 bushels; barley lost 9,000,000, being estimated now at 195,000,000; rye remains at 84,600,000, and buckwheat at 17,200,000 bushels. Hay is estimated at 102,000,000 tons, a decrease of 9,000,000 tons in a month.

FARMERS MAY DISCOUNT WHEAT

TEXAS producers were up against it. Galveston was embargoed, elevators were full, farm storage exhausted. They were willing to let their wheat go at a discount from Galveston price rather than have it rot on the ground, as it was doing in many cases. The matter was referred to Mr. Piazzek of Kansas City, and he in turn referred it to the Grain Corporation office in New York. The following telegram was received by Secretary H. B. Dorsey in reply:

If the most advantageous terminal of dealer or miller is embargoed and he has no unoccupied space in his elevator or mill, he may purchase from the producer at producer's request on a basis of a proper reflection of the most advantageous buying terminal which may be open for shipment of wheat. Dealers are advised that any abuse or deception of relation to this temporary privilege would be a violation of both his license and agreement.

If this condition prevails in other sections and advantage is taken of this decision, for his own protection the grain dealer should demand a written request from the farmer in every case. As it is a "temporary privilege," the advice of your Grain Corporation vice-president should be secured in all cases.

THE NATIONAL CONVENTION

THE annual meeting of the National Grain Dealers Association is always an event of first importance to the dealers of the country. After all is said and done, the National is the highest grain authority and its decision on trade rules, etc., is final, therefore the meetings at which these decisions are made are vital to every grain dealer.

But this year there is a new situation which should bring out the largest attendance ever recorded at a grain convention. A spirit of collective bargaining has taken hold of the whole world. It is the ripple created by the splash of Bolshevism in Russia and is manifested by strikes, walkouts, selling agreement among farmers, and other mass demonstrations by which certain groups unite for higher wages, higher prices or special privileges. This spirit effects legislation as well as industry.

The grain trade is in a critical position as many movements are getting under way, any one of which might mean a serious inconvenience if not the total disruption of the trade. The final disposition of the railroads and the determination of the rate-making body; future trading agitation; Government regulation and control such as the Kenyon Bill provides for the packers. These and many other questions will be settled during the

coming year. If the grain trade is to exert any influence whatever in the settlement of these questions which so vitally affect its welfare, there must be a crystallization of sentiment and thorough agreement in the trade on each issue, and such agreement can only be made at a mass meeting such as the convention affords.

The co-operative elevators are as intimately concerned in these questions as are the independent dealers and they should be well represented. The interests of co-operatives and independents are identical so far as national policies are concerned and there should be closer co-operation between the two. The united grain trade is a potent force in Congress or in industry, whereas individual or sporadic effort count for little. It is up to the trade to formulate its policies and reach an agreement, and every country shipper, every terminal operator, every co-operative manager, every broker and every miller, who possibly can do so, should be present to lend his counsel and his influence at the meeting. St. Louis hotels can accommodate all, and everyone will be welcome.

WHERE ARE THE CARS?

EVERYWHERE the shippers are complaining of lack of cars. The Southwest says that their cars are loaded with hard wheat and sent to Minneapolis where they are loaded with flour for the East, or used up there; the Northwest claims that hundreds of their cars have gone into the Southwest with flour or spring wheat and have never come back. Every section blames some other section. As a matter of fact, every section is largely to blame.

Since the war ended there has been a marked letting down of morale in every section of the world, among many groups it has reached the stage of demoralization. The records at the terminal markets show that shippers have entirely lost sight of the fact that light loading decreases the availability of rolling stock. Last year the Milwaukee records showed that the average loading for wheat cars was 40 tons, this year it is 37; grain products including flour last year averaged 35 tons to the car, while this year the average is but 30. And so on down the list. The Railroad Administration asserts that if cars were heavily loaded there would be no shortage, at least there would be about 15 per cent more cars available.

The heavy loading of last year was inconvenient in many cases, no doubt, but it did go far in making up the car shortage and the same would be true this year if the mantle of public responsibility had not been shaken from the shoulders of each individual.

An assistant commissioner of agriculture in Minnesota claims that the spring wheat states will gain \$40,000,000 from the order fixing the discount on low grades. As the entire spring wheat crop is estimated at 208,000,000 bushels, it would mean about 20 cents a bushel if the entire crop were low grade. That is the sort of wild talk that makes reconstruction difficult.

EDITORIAL MENTION

Moderation in speech and hard work are the panaceas of the troubled times.

The Plumb plan may be a plum for railroad employes, but it's a lemon for the rest of us.

California interests are in Washington to urge a tariff on beans. We prefer catsup on ours.

It looks as if you had better make your hotel reservation at St. Louis for October 13, early.

A pessimist is a man afraid of the future. An optimist keeps his head and smiles. Be an optimist.

The wise farmer is watching his corn hills for promising seed ears. After corn is in the crib, picking seed is a gamble.

Even in these times of trouble we are thankful for one thing: We didn't invest in Russian rubles nor in German marks.

In view of the possible advance in rail rates dealers who contract for corn should specify the price, contingent on rate advance.

Pershing closed up the New York Produce Exchange when they celebrated his arrival. That is more than the kaiser could do.

With export cut to the bone by depreciated exchange what would we have done with a billion and a quarter bushels of wheat?

If water rates were allowed to find their level independent of railroad competition the nation's carrying charges could be reduced enormously.

On August 28, No. 4 northern wheat brought from \$2.35 to \$2.50 at Minneapolis. And still farmers were holding their wheat for better prices.

We note the Government reports that the prune crop is 132.1 per cent of the average. Perhaps that is what ails some of our legislators at Washington.

Three hundred and twenty-six new members in the National Association this year. The trade is gradually learning the value of organization and co-operation.

It looks as if the Grain Corporation would be well stocked up on low grade wheat before the season is over. Millers will not want much of it at prevailing prices.

An effort is being made to amend the Vestal Bill, H. R. 7482, making it effective on July 1, 1920, instead of on January 1. The Bill provides that cereal products be packed in

100-pound sacks or in multiple fractions thereof, and shall be labeled with net weight of contents.

Elevator construction in the Pacific Northwest will continue to boom as farmers are finding it more economical to haul their grain many miles in bulk rather than sack it.

Many grain cars are in bad shape but have to be used for want of better. A good job of coopering is time well spent, for the aggregate of grain it will save is enormous.

The French wheat crop is estimated at 184,000,000 bushels as against a normal pre-war yield of 520,000,000. But this does not mean that we will be called upon to make up the deficit.

The first corn exposition in Bahia, Brazil, is being held this month. If corn shows do as much for maize in Brazil as they have in this country, the southern Republic has a future in corn growing.

Under favorable conditions, Argentine has planted a large acreage of wheat and oats. They are more optimistic than many of our farmers who might well take a lesson from our southern friends.

British food control has been reimposed on bacon, ham and lard and rationing is reimposed on other foodstuffs. And yet all observers declare there is no lack of food in Great Britain. Has control become a habit?

The experiment in shipping grain direct to Europe from lake ports without transfer has not been successful. To pass the Welland Canal only light loads are permitted and the cost of operating is greater than the freight.

The Interstate Commerce Commission has practically adopted the shippers plan for loss and damage claims. The least the shipper can do to protect his interest is to have his scales in order at all times and inspected at regular intervals.

The coal situation promises to be serious this winter. Up to July 5, 261,000,000 tons were produced, compared with 364,000,000 tons for the corresponding period last year. Non-production is the cause of high prices in most lines, and the only corrective is work.

It will be a long time before we have the final accounting on the bread subsidies which England and France have been paying. To be sure, we are informed that it has cost the British Government \$250,000,000 yearly, and the French Government about 1,500,000,000 francs, but this is the people's money, and what it has cost in paying the subsidy has been more than made up in the lowered cost of bread, which in England has been kept around 18 cents for a 4-pound loaf and in France one franc per kilogram. Subsidies of any kind are distasteful to Americans, who like to stand on their own feet, but under the critical conditions which obtained in England and France there is

little doubt but the plan was wise, inasmuch as it reduced the cost of living for those who found living difficult, at the expense of those who paid the heavier taxes.

Farmers who raise their own grain for hogs, figure that they should make a profit on the corn they feed as well as on the pork they sell. Some of us are satisfied with one profit.

Michigan politicians are planning a bond issue of \$5,000,000 to build state-owned public elevators "to reduce the cost of living." Paying taxes to make good a \$5,000,000 bond issue is about as near reducing the H. C. L. as most politicians can come.

Farmers of North Dakota are planning to meet with Julius H. Barnes "with the view of having the Federal laws changed because they conflict with the North Dakota grain grading laws." Of course Mr. Barnes has no more to do with grain grades than General Pershing has, and North Dakota ideas on grades are no more applicable to the country at large than are Bolshevik ideas of the distribution of wealth.

The Farmers Grain Company of Embden, N. D., has started an injunction suit before Judge C. F. Amidon, to prevent the enforcement of the North Dakota grain grading laws as they conflict with the Federal law. The outcome of the suit will be watched with interest, but whatever the decision, as soon as N. D. grain crosses the state border it is judged on Federal grades and N. D. dealers had better keep that under their hats.

The International Wheat Show will be held at Wichita, Kan., from September 29 to October 11. In addition to various grains exhibited, there will be an unusually large number of farm and household labor saving devices. More varieties of wheat than ever before displayed have been entered and the show will be largely attended. These wheat shows have been important in drawing attention to new high-yielding strains, and their importance will continue to increase, as more new wheat strains are being developed than ever before.

In his farewell address, the retiring president of the Winnipeg Grain Exchange discussed, without gloves, the new plan by which the Government, through the Wheat Board, will handle all the wheat of the Dominion. He pointed out that so long as the wheat market is bullish, they can get by, but as soon as normal prices return and the Government is forced to compete with commercial firms on a business basis, the case will be different. He forgets one thing, however. As soon as the Government discovers that its wheat transactions are hopelessly muddled, and that the producers and consumers are both sore, and it has a lot of unprotected contracts on its hands, it can simply return the business to the trade and tell the farmers that, now that the crisis is safely over, the grain trade can resume operations, but to watch out for them or they will be done in.

G. S. CARKENER
Kansas City

NEWS OF THE TERMINAL MARKETS

E. E. McCONNELL
Buffalo

ASK EXCHANGE TO COME BACK

It is stated that a new effort will be made by the Cincinnati Chamber of Commerce to have the Cincinnati Grain and Hay Exchange move its quarters back to the old location. A committee has been appointed to take the matter up with the Grain Exchange. It is about two years since the members of the Cincinnati Grain & Hay Exchange withdrew from the Chamber of Commerce after the latter had refused to give it full control over its own affairs.

NEW ORLEANS INSPECTION FEE INCREASED

The Grain Committee of the New Orleans Board of Trade has had under consideration the question of increasing the inward inspection fee on grain from 75 cents to \$1. Secretary H. S. Herring says, in this connection:

"Increases have been made in other markets, and we find that, owing to a very material increase in the cost of operation in our Inspection Department, and in order to maintain its efficiency, it has become necessary, and we feel justified in making an increase in our inward inspection fee from 75 cents to \$1 per car. This change is to become effective October 1, next."

PITTSBURGH POINTERS

There has been a fairly active demand for corn and our market is bare of supplies. Values are following the Western fluctuations. It is generally conceded that the recent movement of old corn has about subsided, and there has been good inquiry the past few days.

There has been a fair to good movement of oats both in and out of this market. The domestic trade seems to be interested in oats, and interior points are buying more freely than usual, owing to the extremely light crop of oats east of us. There is no inclination on the part of the country shippers, in our nearby Western States, to offer oats, at present values, therefore, our receipts are becoming lighter each day.—*Harper Grain Company, Pittsburgh, Pa. Letter of September 11.*

CAR SITUATION IN ST. LOUIS ACUTE

Receipts of wheat in this market have been about normal for this season of the year. Millers are coming into the market again and are bidding fair premiums for desirable samples of wheat. We notice considerable deterioration in the quality of the wheat that has been arriving in the past 10 days. This is due to the grain having been left in the shock and exposed to the weather. We rather look for a fair run of wheat to continue for the next 60 days. The car situation is even more acute than it has been. Wheat has been moving out of this market rapidly in the past two weeks to the Seaboard and also to interior mills.

Receipts of corn have been below normal and the demand only fair. The big industries have been the big buyers of corn here, while the feed manufacturers have also taken quite a lot of corn. The buying generally has been more or less of a hand to mouth affair. The corn mills are slow buyers, claiming that there is no demand for the product. We have a fair amount of old corn back in the country that would move faster if the car situation was better, but on account of the acute condition of the cars we doubt if there will be any heavy movement of grain to the market. There is some little disposition to sell this corn at about the December price.

The Texas corn arriving here is in an unsatis-

factory condition, the quality being infected more or less, with weevils.

There has been a fair run of oats here and the demand has been good. All classes of buyers have been in the market for oats and everything has been well taken. Owing to the light stocks of oats in the interior, we look for a continued good demand on oats in St. Louis.

Everybody is busy now making arrangements for the National Grain Dealers Convention here October 13, 14 and 15. You are all invited to be present.—*Elmore, Schultz Grain Company, St. Louis, Mo., in recent letter.*

A. C. CURRY JOINS C. H. THAYER & CO.

A. C. Curry late secretary of the Mueller & Young Grain Company of Chicago has severed his connection with that concern and associated himself with



A. C. CURRY

C. H. Thayer & Co., with offices in the Rookery Building, Chicago. Mr. Curry will have entire charge of the shipping department of the business as well as assisting in the receiving end. He has been connected with the grain trade of Chicago for many years and the experience which he has enjoyed will be devoted to the interests of the company in which he has formed his new association.

The firm of C. H. Thayer & Co., to which Mr. Curry now devotes his activities has grown to be one of the large grain receiving houses of the West. It was established October 1, 1906, by C. H. Thayer, who had become prominent in the Chicago market as a receiver and merchandiser of grain. The company maintains offices at Boone, Iowa, and Sheldon, Ill., for the convenience of shippers and has also branch offices in the Mitchell Building at Milwaukee, Wis., and the First National-Soo Line Building, Minneapolis, Minn., being members of these exchanges.

WHEAT EXPORTS—HOW LARGE?

We can export about 300,000,000 bushels wheat and flour this season and still have an average carry-over next July. Our exports last season were 290,000,000. The record was 333,000,000 on the big 1914 crop. How much will Europe take this season? The Government wants to build up a large visible

supply before selling freely abroad. Europe can go several months on her own crops. With her money so depreciated and taxes so heavy, she will economize strictly. Our largest exports may be made the last half of the season, especially if Argentina and Australia suffer much crop damage. They harvest in December and January.—*C. A. King & Co., Toledo, Ohio. From Special Market Report of recent date.*

DEMAND FOR ALL GRAIN BUT CORN

Corn in poor demand, No. 2 yellow quoted today at \$1.67 track Buffalo, market unsettled and buyers are running away.

Oats are in fair demand and tables are about cleaned up every day.

Barley is steady and good Michigan barley is quoted at about \$1.45 track Buffalo, moderate inquiry for good malting barley.

No. 2 red winter wheat selling at about \$2.28 Buffalo and all the arrivals are taken at about that price. Lower grades at market difference. Dark Northern spring wheat has been in fair request but quiet now. Dark No. 2 Northern spring wheat is worth \$2.63 Buffalo and dark No. 3 Northern spring \$2.50 Buffalo.—*Whitney & Gibson, Buffalo, N. Y., Letter of September 11.*

CORN ABSORBED IN PEORIA

Receipts of corn here recently have been fair and prices have been declining, mostly in sympathy with the break in other markets. There is very little demand for shipment. Local industries have been good buyers and they have been absorbing about all the arrivals. There would undoubtedly be a better movement of corn if cars could be obtained to move it. Farmers are apparently willing to sell old corn even on big breaks.

Receipts of oats have been moderate and prices have been following the trend of other grains. There has been very little shipping demand for this cereal and we hear of no export inquiry. The bulk of the arrivals here are being taken by outside cereal mills. The movement of this cereal is also being retarded by scarcity of cars.—*Mueller Grain Company, Peoria, Ill., in late letter.*

THE TREND AT MINNEAPOLIS

Our corn market has, on very rare occasions this year, shown any independent strength. It has depended upon Chicago, Milwaukee and Peoria for its basis most of the time. For the last few days, we have, however, been on a higher basis, due to some shorts covering on the part of cash handlers, and also due to one large buying order for Canada where the corn is going to be converted into starch. Today, however, most of this support seemed to fade away, so that it is hard to say just what corn is worth in our market tonight, but there is evidence it will have to line up with Eastern markets tomorrow.

Relative to wheat: We have a demand here which is hard to satisfy on the choicer qualities of spring wheat, but on the softer varieties of wheat—particularly winter wheat—sales are very slow. For instance, No. 1 dark northern spring wheat sold for \$2.80 here today whereas the softer varieties of No. 2 hard wheat were worth from \$2.22 to \$2.25. Our millers early made heavy purchases of new winter wheat and until they are able to work off this wheat in conjunction with the stronger varieties of new spring wheat, there will not be any keen demand here for ordinary winter wheat. A little of the dark hard varieties of winter wheat are salable

here at from \$2.30 to \$2.35. Most of the North Dakota new wheat grades No. 3 and a good percentage of it grades No. 3 dark northern, and that class of wheat, although it may test only 55 pounds, sold today from \$2.50 to \$2.65. Thus, it will be seen from the figures we have given above that tremendous premiums are being secured here now for the better, glutenous varieties of the hard spring wheat.—*Godfrey-Blanchard Company, Minneapolis, Minn. Letter of September 11.*

MILWAUKEE ABSORBS OFFERINGS

Corn, of course, is following the downward trend of the futures but the movement being so light we have experienced no trouble up to the present time in disposing of everything that is offered. These features also apply to oats but during the past few days, however, buyers seem to become anxious for heavier oats and demand for the very light weights is less active.

Indications are that receipts of oats will be light during the immediate future and if so would not be surprised to see some reaction in values and also in the general demand. Our millers are very anxious for a bigger supply of spring wheat, especially for qualities grading No. 4 or higher and premiums are quite substantial.

The lower grades are finding ready sale with the exception of samples showing a heavy percentage of blighted and damaged wheat which are being taken by the Grain Corporation. Our premiums on winter wheat ranged from ½ to 2 cents per bushel and elevator interests would absorb more offerings than are arriving at this time.—*E. P. Bacon Company, Milwaukee, Wis. Special letter of September 12.*

FREIGHTS TO CONTINUE HIGH

"Mr. Lloyd George thinks that freights will continue high, and probably in this connection he has been well advised," says the *London Corn Circular*. "It is quite possible, indeed more than probable, that the Government will retain control over British shipping for at least another six or nine months. It is supposed to be free at present, but this is not so, as while the system of licensing and directing tonnage continues there can be nothing like freedom. On the other hand it must not be forgotten that America is turning out tonnage pretty rapidly, and that the work of transporting troops will come to an end very soon. As soon as these vessels are released they will be reconditioned and returned to service, and in another six months' time there will be a fairly full supply of tonnage about. At the same time there is no immediate likelihood of rates falling off, although there may be some adjustment in the charges made for carrying grain, etc., to France and Italy. One of the reasons why tonnage is scarce and dear is the deplorable delays which take place at the ports on account of strikes and lack of facilities."

ADVISES CAUTION

The Hoover-Armour statements of the week were of ultra-bearish character. They put the accelerator on the fast slipping market. December corn registered around 16-cent decline for the week, with a total decline around 45 cents from the recent high.

Hoover suggests difficulty of bankrupt Europe in trying to purchase food supplies without the necessary funds. Her credit is low in the international Dun and Bradstreet's. Ships laden with food are being held at French ports for lack of funds to pay for cargoes. England refused to guarantee payment.

Hoover's statement was said to be the first bearish one he had ever issued. It was pretty good for a first attempt. "Formerly the greatest booster, he is now apparently discouraged at the feeble European trade rally and slow purchasing power of large supplies on tap in Europe." Holders of European food may have to cut prices drastically and American growers are seeing their hopes of an unlimited European absorbing power vanish into smoke.

Hoover urges United States to extend credits of \$3,000,000,000 to \$4,000,000,000 to Europe for year

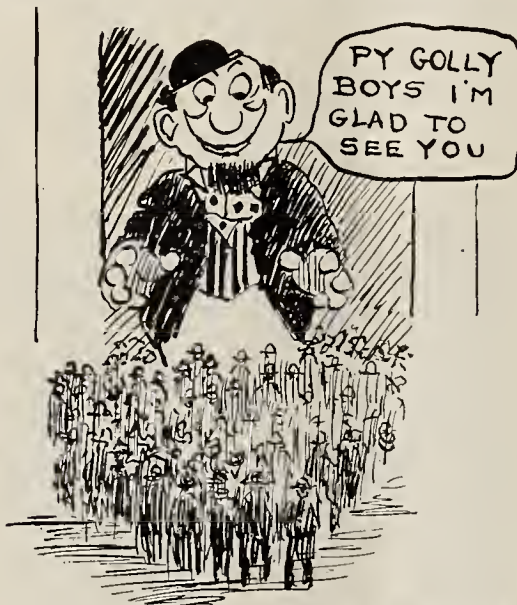
and a half to two years to provide market for American food surplus.

Ogden Armour's remarks that the crest of high food prices had passed, wrote a "ditto" under the Hoover statement and supplied inspiring reading to millions of American families. It did its share to aid the "super-decline" in corn.

Markets are undoubtedly meeting the world demand for price readjustment and the feeble European buying power. The only question now is how far the readjustment may go. Markets often go too far on such a movement as this, and a certain degree of caution is always advisable after such drastic liquidation.—*Southworth & Co., Toledo, Ohio. From the Weekly Market Review.*

WILL YOU MEET LOUIE?

As far as we know, there is only one member of Southworth & Co. of Toledo, Ohio, who has met everybody, and that is "South" himself, who "began in '81" or thereabout. Southworth's *Weekly Market Review* of August 30 gave over its back cover to the meeting of the Grain Dealers National Association at St. Louis, October 13, 14, 15, in vibrant classic hexameters. The author confessed he never met Louie, but, lacking acquaintance, he



HOW LOUIE WILL WELCOME THE GRAIN TRADE

should have consulted E. L. Southworth ("South") regarding Louie's characteristics.

We, likewise, have heard of Louie but never met him, but shall ask "South" to introduce us at St. Louis. Louie will be under considerable handicap this year, owing to the severe drought, but a fall freshet may happen about the convention period. The hexameters follow:

Once upon a time
There used to be a
Song called
"Meet Me in St. Louis,
Louie."
Well, we never met Louie there,
But we always had a
Humdinger of a time
When we got to St. Louis,
And so we feel
Pretty safe in saying
That you'll have a
100 per cent Time
If you attend the
Grain Dealers National Convention
At St. Louis;
And it begins
October the 13,
And in this case
13 is unlucky
For the guy that stays away;
And you know Charlie Quinn,
Well, Charlie says the program
Will be some program,
And Charlie usually knows;
And P. E. Goodrich,
Who's president of the Grain Dealers,
Will run the Convention;
And when it comes to running a
Convention right,
They say Goodrich never Tires;
So don't miss it,—
And there you are.

CHICAGO REFLECTS WORLD POSITION

Exports from Argentina: Wheat 4,704,000, corn 2,628,000, oats 418,000 bushels; visible there, wheat decreased 370,000; corn increased 400,000 bushels.

A Paris cable says the French Government will, by official decree, requisition the 1919 crop of mixed grains and rye; a measure made necessary by the poor outturn of their wheat crop and to insure break for France during the coming winter.

Strength in corn at the opening occasioned by the new credits established for Germany was quickly overcome by the labor situation. Liquidation and selling pressure continued during the session. A further sharp decline for the current month, made easier by the clearer demonstration now that there is plenty of corn to supply all current needs. Of course, the position of this year's crop and its early maturity are also recognized as an all important bearish factor. A better domestic trade in cash. Broomhall Liverpool cables reflect no change in the position of supplies in the United Kingdom and the continent, but refer to the increasing anxiety in Argentina to market the large surplus still lots fair only.—*Pope & Eckhardt Company, Chicago. From market letter of September 12.*

NEW TRAFFIC MANAGER FOR BALTIMORE CHAMBER OF COMMERCE

G. Stewart Henderson is the newly appointed traffic manager for the Baltimore Chamber of Commerce, succeeding Herbert Sheridan. Mr. Henderson entered the employment of the traffic department of the Baltimore, Chesapeake & Atlantic Railway in 1905, and after performing various duties in that department in connection with movement of freight and passenger traffic, both by rail and water, was transferred in 1911 to the accounting department of the same company and placed in charge of the interline accounting and revision of waybills, which position he held until September, 1916, when he resigned to accept the position of chief clerk in the traffic bureau of the Baltimore Chamber of Commerce.

In September, 1917, Mr. Henderson was made acting traffic manager of the Chamber in the absence of the former traffic manager, who was at that time furloughed to serve the Government during the war period, and upon his return in March, 1919, was appointed assistant traffic manager. The former traffic manager resigned in April, 1919, and Mr. Henderson has since carried on the work of the bureau until his recent appointment as traffic manager which was made by the Board of Directors August 1, 1919.

BEAR MOVEMENT IN CHICAGO

New low figures were again made for the deferred deliveries of corn, with September leading the decline. Liquidation has been the prominent feature and not until \$1.45 for September was reached did cash houses become good buyers. An almost continuous decline has been under way for 45 days and as yet there is nothing in the news to warrant purchases except for temporary reactions, such as we have had recently and which are due chiefly to the technical position of the market. The news is about as bearish now as it was bullish at a higher level, and it is generally regarded that a readjustment of values from a war to a peace basis is now under way. Sentiment is predominantly bearish and the trade in general is looking for still lower prices.

Oats showed fair resistance to selling pressure early, but the decided weakness in corn more than offset the effect of buying by commission houses and locals. The Eastern demand has been rather slow. Receipts continue very small and estimates for tomorrow are for 125 cars. The farmer continues his holding policy. The legitimate situation is undoubtedly strong, but it will be difficult to bull oats until the present conditions take a turn for the better.

Provisions were firmer with hogs, which were higher. Germany has been buying products here lately and in this respect it has been announced that small credits have been granted to this nation by Eastern bankers, which induced some buying.—*Simons, Day & Co., Chicago, in market letter of September 12.*

TERMINAL NOTES

Carl Grindler has been appointed assistant traffic manager of the Cairo Board of Trade, Cairo, Ill.

Charles W. Avery of the Thresher-Fuller Grain Company of Kansas City, Mo., was a recent visitor "on 'Change" at Chicago.

A. A. Cunningham of Sneath-Cunningham Company of Tiffin, Ohio, was a recent visitor on a number of eastern exchanges.

Arthur Thistlewood of Thistlewood & Co., Cairo, Ill., took a recent pleasure and crop observation trip in his automobile to Chicago.

A membership in the Minneapolis Chamber of Commerce has been purchased by Eugene Askegaard, a grain dealer and banker at Comstock, Minn.

A high mark was set for sale price of memberships on the Chicago Board of Trade when a membership was sold for \$10,300 net to the buyer with 1919 dues paid.

John S. Pillsbury was appointed to fill the vacancy left by the resignation of W. T. Fraser on the Transportation Committee of the Minneapolis Chamber of Commerce.

H. C. Dignam has been succeeded in his position as manager of the brokerage department of the Western Pacific Grain Company, San Francisco, Calif., by Henry E. Strout.

The Universal Oats Company of Dixon, Ill., has purchased additional property on which it will erect a new mill having a daily capacity for turning out about 1,000 barrels of oat products.

A record price, \$8,100, was recently paid for a membership in the Omaha Grain Exchange, Omaha, Neb. The purchaser was E. E. Huntley of the J. Rosenbaum Grain Company of Chicago.

W. T. Ellis has succeeded John Cardiff as manager of the Indianapolis office of E. Lowitz & Co., of Chicago. Mr. Ellis is an experienced grain man and went to Indianapolis from the Chicago office.

The members of the Good Fellowship Club of the Peoria Board of Trade held their annual outing late in August, at Glen Oak Park. Games and contests for prizes were an interesting feature of the event.

Milton Logan has organized the Logan Grain Company at St. Joseph, Mo. The company will have offices in the Corby-Forshee Building and will do a brokerage business with Mr. Logan in active charge.

The season's first car of Argentine corn arrived at Chicago September 3. It came via Galveston and inspected sample grade having some weevil. It was sold by John Barrett to the American Maize Company at \$1.72.

George Strom, manager of the Sioux City, Iowa, office of Taylor & Bournique Company of Milwaukee, Wis., is recovering from an operation for appendicitis. During his illness the office was in charge of E. Strom.

The Hunter-Robinson Milling & Grain Company has succeeded the Hunter-Robinson Milling Company at St. Louis, Mo. A grain department has been added to the business in charge of Ward Smith and H. R. Wilson.

The appointment was recently made of C. W. Winslow of Kansas City, Mo., as assistant inspector of the Kansas State Grain Inspection Department with headquarters at Wichita, Kan. He succeeds A. A. Dunwire, recently retired.

The Bushfield Grain Company will shortly start in business at St. Louis, Mo., with offices in the Pierce Building. The head of the firm is Major J. A. Bushfield, for two years past chief of the Quartermaster General's office at Washington, D. C.

C. T. Mears of the Itasca Elevator Company of Duluth, Minn., was recently elected a member of the Arbitration Committee of the Duluth Board of Trade to fill the place of W. B. Joyce, who became a member of the Board of Directors.

It was decreed by the directors of the Chamber of Commerce of Minneapolis at a recent meeting that the agreements making terminal elevators "regular" under the rules of the association will expire by limitation on August 31 of each year.

Fresh applications and financial statements will be required hereafter, annually of all elevators desiring to become "regular."

On September 1 the organization of a Grain Control Committee was effected at Sioux City, Iowa, with S. A. Morrison, chairman. C. N. Curtis, railroad traffic assistant, and M. M. Betzner, representing the U. S. Grain Corporation, compose the committee.

The Chicago Board of Trade, Chicago, Ill., offers \$10,000 in premiums for best grades of corn, oats, wheat, barley, rye and hay shown at the International Grain and Hay Show at the International Live Stock Exposition at Chicago November 29 to December 6, 1919.

The Fort Worth, Texas, branch of the Moore-Seaver Grain Company of Kansas City, Mo., has been for the past few weeks, during the absence of its local manager, under the management of Major Moberly. Major Moberly has now returned to Kansas City.

The business of the Scroggins-McLean Company at Minneapolis, Minn., is hereafter to be conducted by the new corporation, the Scroggins Grain Company. There is no change in the personnel of the company as Mr. McLean has not been with the company since August 1, 1918.

Edward B. Culver, son of "Big Chief" Culver of Toledo, Ohio, has been appointed by the Chamber of Commerce of Sandusky, Ohio, as its grain inspector. For some years he has been in the Toledo grain inspector's office working under the able supervision of his father.

A cash grain consignment department has been added to the business of the Terminal Elevators of Kansas City, Mo. The Terminal company is one of the largest grain handling organizations in Kansas City. Robert Y. Smith, who will be manager of this new department, held a similar position with the Eugene Cox Grain Company.

Notice has been sent out by James T. Bradshaw, grain warehouse commissioner of Missouri, that effective September 1 the charge for inspection in and out of elevators and for reinspection at St. Louis would be \$1 per car. The change was made in order to conform to the charge for the same service as at East St. Louis, Ill.

There is reported to be a great deal of satisfaction among St. Louis shippers over the recent announcement of the United States Railroad Administration granting joint water and rail rates from St. Louis via Memphis. It is expected that the granting of these rates will insure a substantial increase in the Mississippi river barge line traffic.

Clarence C. Gray will head the St. Paul Grain Exchange the coming year. At the annual meeting held recently Ben Baer was elected treasurer and Jas. F. O'Meara, secretary. The eight new directors elected for terms of two years each were: W. F.

Jameson, W. E. Coles, Jr., C. E. Griffith, J. F. Oiefenhach, J. G. Crites, L. M. Abbey, L. R. Rolfe, Elmer Ehgren. The business of the Exchange has been very large recently.

Mayer-Holbrook & Company, Inc., grain commission merchants of Chicago, Ill., with offices at 327 South La Salle Street, made an announcement recently of special interest to grain shippers of Iowa, to the effect that they had opened an office in Des Moines, Iowa, under the personal management of V. S. Beall. Mr. Beall is well known to the Iowa grain trade, having had over 16 years experience in the grain business. Offices are in the Hubbell Building.

Simons, Day & Co., of Chicago, have issued a small booklet bearing the title "What Is It All About?" The company answers the question by a review of present conditions and pointing out that pessimism never got any one anywhere and advocating optimism and reasonable frugality as the best course until present times change. The world needs capital and labor. Every one should get busy in a spirit of unity and it would be found that intensive productivity will prove the remedy for present ills.

I. C. Lyman of Milwaukee, Wis., has purchased the 300,000 bushel terminal elevator of the Lyman-Joseph Grain Company, which recently discontinued business. Mr. Lyman has associated himself with the Franke Grain Company of Milwaukee, and all business in the future will be handled in the name of the Franke Grain Company. He will continue to give his personal attention to the grain business, the same as in the past, and announces that all correspondence for the old firm should be addressed to Franke Grain Company, attention I. C. Lyman.

A new grain handling firm has been organized at Atlanta, Ga., to be known as the Waldrop-Estes Grain Company. The company has purchased the grain, hay and feed establishment of the A. C. Frazier Grain Company, 268-270 Marietta Street, which gives them trackage in the N., C. & St. L. Railway terminals. Messrs. Waldrop and Estes have for a number of years been connected with the W. S. Duncan Company, a feed company, which recently retired from business, selling its interests to T. H. Brooke & Co. The firm has a paid-in capital of \$55,000.

Elmore-Schulz Grain Commission Company of St. Louis, Mo., added to their service to shippers in August by the publication of No. 1 of a monthly bulletin. In explaining the reason for its appearance the company states it is another step in their service designed to keep grain shippers posted on prices, market tendencies, crops, as well as on the little details in connection with their shipments that will enable them to serve their patrons to the best advantage. It's a very entertaining and instructive bulletin and the rear page is given over to the company's Market Review.

TRADE NOTES

Louis H. Brand who severed his connections with the grain cleaning industry to engage in Y. M. C. A. work overseas for the duration of the war, has returned and is now with the Huntley Manufacturing Company of Silver Creek, N. Y.

The Hess Warming & Ventilating Company of Chicago recently replaced the alcohol lamps in the grain inspection department laboratory of the Cleveland Grain and Hay Exchange with new electric heaters, which are regulated by thumb screw the same as a lamp. The inspectors in charge of the moisture tests are reported to have found the electric heaters a great improvement over the old style lamps.

"Backed By Sidney Service," is the slogan of the Philip Smith Manufacturing Company, Sidney, Ohio. The Sidney Combined Sheller and Boot, to which they are calling particular attention at this

time, is a combination of their regular sheller and elevator boot, requiring no expensive hopping under sheller, and eliminating the necessity for pit or tank under the elevator. In addition to corn shellers the company manufactures a complete line of elevator equipment. A card to them will bring a copy of their new catalog.

This month the Imperial Belting Company, Lincoln and Kinzie Streets, Chicago, is calling attention to "Feature No. 2" of Rexall Conveyor Belting, namely its double stitched and inner-locked construction, which locks the plies of the strong Rexall fabric together inseparably so that they can stand the pull and wear of conveyor service. At the same time this construction eliminates any tendency to unravel when the belt is cut or injured. The Imperial Belting Company maintains an expert engineering staff at the disposal of any one

wishing assistance in solving difficult or unusual conveying problems.

Scale Catalog No. 73 has been issued by The Standard Scale & Supply Company, 1631 Liberty Street, Pittsburgh, Pa. "The Standard" line includes every type used in grain elevators: Portable, hopper, dormant, wagon, dump, motor truck and railroad track scales. The company maintains branch offices in New York, Philadelphia, Cleveland, Chicago and Baltimore.

On another page of this issue will be found a picture and account of a Preston-Lansing Tile Elevator which is now under construction at Marion, Ind. This is but one of literally hundreds that the J. M. Preston Company, of Lansing, Mich., is erecting all over the country. The company reports an unprecedented demand for these fire-proof rat-proof and moisture tile grain tanks, ranging in size from small farm storage to large receiving elevators.

The Edward A. Pratt Audit Company of Peoria, Ill., with Chicago offices at 1403 City Hall Square Building, has issued a new brown line ledger in three standard forms, that will be sure to interest grain men desirous of simplifying their bookkeeping systems. To the many newly organized grain commission firms that have sprung into existence this past year we recommend investigation of the Pratt Tab-Cut Ledger, with brown lines—"Easy On the Eyes."

Rope transmission for power has made enormous strides in the last few years. There is scarcely a large elevator in the country that does not have at least one rope drive. The Waterbury Company, 63 Park Row, New York, makers of Waterbury Fibreclad Wire Rope, has issued "The Waterbury Rope Handbook," a regular engineering manual on rope. A copy may be had for the asking.

The American Milling Company of Peoria, Ill., are calling attention to the fact that they are running double shifts at their plant at Owensboro, Ky., in order to keep up with the demand for Suerene Feeds until the new plant at Peoria is completed, which it will be within a very short time. The company is finding excellent demand for feeds from grain dealers. The company asks that all inquiries or orders be addressed to the main office at Peoria, Ill.

"It doesn't make any difference in what part of the country you start investigating," says the Union Iron Works, of Decatur, Ill. "You will find representative machines of our Western line everywhere." With a gain in the corn crop of 70,000,000 bushels, according to the Government's September Crop Report, the Union Iron Works expect a demand for Western Corn Shellers and Cleaners in the immediate future even greater than their present excellent business.

As a result of the recent strike of the railroad shopmen, literally hundreds of freight cars are in service that are just "getting by" and no more. The grain shipper can ill afford to take a chance on shipping corn and wheat, or any other grain for that matter, at their present values, in cars that are in questionable condition. One of the surest ways to insure against grain leakage in transit is to line the car with Kennedy Car Liners, made by the Kennedy Car Liner & Bag Company of Shelbyville, Ind. The company states that 3,000 miles of box cars were protected by Kennedy Car Liners last year. The average car length is a trifle less than 50 feet. Figure it out and you can see what the grain trade thinks of Kennedy Car Liners.

"Low Cost Per Year of Service," is the point emphasized by the Joseph Dixon Crucible Company, Jersey City, N. J., when urging consideration of Dixon's Silica-Graphite Paint for grain elevators. The history of Dixon's Silica-Graphite Paint covers a period of over 50 years. It has proven its value in all climates and under all trying conditions. The man who buys it and has it applied properly imposes no burden on his pocketbook and receives the maximum service at the least expense. It is made in four colors—olive green, dark red, slate color and black. It is suitable for exposed

metal work of all kinds—roofs, fences, smokestacks, boiler-fronts, bridges, etc.—and is equally useful for wood surfaces. Back of it is the reputation of the Dixon Company, which has been doing a successful business for nearly 100 years.

SALEM ELEVATOR BUCKETS

There are probably more Salem Elevator Buckets used in grain elevators than all other styles or makes of buckets combined. This very useful article is like a grain of wheat. Singly it does not give the impression of having great importance, but combined together and working steadily hour after hour in elevating the grain to the top of the house,



FRONT VIEW OF SALEM BUCKET

to scales, cleaners, or bins, it becomes a powerful factor in the operation of the country elevator or large terminal plant.

The illustrations shown in connection with our article are from the No. 18 catalog of Skillin & Richards Manufacturing Company of Chicago and the originals were manufactured by that well-known grain elevator machinery building house. The Salem Bucket is so universally known for its advantages as a general utility bucket that no extended description of it is necessary and scarcely any word of argument in its favor. It is accepted generally as the best device for handling all classes of materials in all kinds of industries.

The Salem is stamped from one piece of sheet metal, with rounded contour throughout, making it smooth in form, durable in service and clean in handling and delivering of materials. There are no seams in front nor on the ends, the laps being made on the back and bottom at the ends. On the back the laps are riveted or spot welded, on the bottom the end pieces are bent under and hammered tight.

The reinforcements across the top of the back and extending down both inside and outside to receive the bolt holes, are spot welded onto all buckets of No. 18 gauge and lighter, and onto all buckets of No. 16 gauge 10x5½ and larger in size. Smaller buckets of No. 16 gauge, and all sizes of buckets of heavier gauge are of ample strength without this reinforcement.

In the manufacture of the Salem Buckets the Skillin & Richards Manufacturing Company cover the widest range of service conditions by the man-



BACK VIEW OF SALEM BUCKET

ufacture of a very full line of regular and special types and sizes, made in various gauges of steel, from the lightest practical for ordinary work to the heaviest necessary for most severe duty. The company has a complete equipment of special machinery for the manufacture of buckets and can fill the largest orders with promptness. A full line of all sizes is also carried to insure prompt shipment.

SERIOUS depredations upon Kansas alfalfa by the webworm are indicated by the number of reports from owners of injured fields received by Geo. A. Dean, entomologist at the Agricultural College. The worms reproduce three or four generations in a single summer and then pass the winter in comfortable silken lined cocoons.

PITTSBURGH SUFFERS FIRE LOSS

On September 8 the Central Grain Elevator at Pittsburgh, Pa., was totally destroyed by fire. The house contained at the time about 300,000 bushels of grain, mostly oats, malt and corn, valued at \$500,000, which was completely covered by insurance. The grain was owned by 20 different firms.

The fire started with the explosion of a gas engine, which cut and bruised Joseph Rogolah, an employe. He was rescued and his wounds were dressed in a nearby drug store. During the progress of the conflagration two firemen were also injured. The flames spread from the engine room through a belt hole in the ceiling and the first floor was soon ablaze.

Three fire companies responded to the alarm, but in spite of their efforts the building was entirely destroyed. Nearby buildings were also threatened and the fire department concentrated their attention on them as soon as it was seen that the elevator was doomed.

The house was an old structure, built in 1877, with heavy corrugated iron siding. It was owned principally by the estate of R. S. McCague, Ltd., with offices in the Westinghouse Building, dealers in grain, hay and feed.

SOMETHING NEW IN A GRAIN DRIER

Elevator and mill managers contemplating installing a grain drier in their elevators should be interested in the new grain drier put on the market by the Toledo Grain Drier Company of Toledo, Ohio.

This drier is the invention of an engineer who has spent more than 30 years in solving problems in practical heating and ventilating. The Toledo Grain Drier is composed of units. The different units are built up to form columns of the height required. This form of construction enables the owner to enlarge the drier any time when necessary, by simply adding more units to the drier already installed.

Nothing but heavy galvanized iron is used in the construction, thereby doing away with all screens, a feature which saves the owner the trouble and expense of renewing the corroded screens from time to time. There is a continuous flow of the grain and even distribution of air throughout the drier, which does away with any streaks of wet grain.

With the drying system is included the Toledo Heater. Hard or soft coal, coke, wood, cobs, or in fact any fuel may be burned with the best results. The heater is made in sections, with a divided fire, so that any one, or all, sections may be used, according to the outside temperature and the size of the drier. An indirect system of air contact is used, therefore only the pure air and no smoke nor gases come in contact with the drying grain. Steam coils may also be used in place of the Toledo Heater where desired.

The drier may be had in any size, to fill the needs of the smallest country house or the largest terminal elevator. A new booklet, "Some Facts About Grain Drying," is being issued by the company. This booklet contains some very valuable information on grain drying and should be read by every grain and elevator man.

ITALY REQUISITIONS GRAIN CROPS

The Italian Government has requisitioned the wheat, barley and rye crops under the same conditions as in 1918, according to the *Economista d'Italia*. Farmers will deliver the amounts requisitioned to the various centers and will be paid the transportation expense at a fixed rate per kilometer (0.62 mile).

The Government has set the following maximum prices for the 1920 crop of Italian-grown wheat: hard wheat, 80 lire a quintal (\$4.20 a bushel); soft wheat, 70 lire a quintal (\$3.67 a bushel). The maximum prices for the 1919 crop, as given in the International Crop Report for September, 1918, are as follows: Hard wheat, 85 lire a quintal (\$4.46 a bushel); soft wheat, 75 lire a quintal (\$3.94 a bushel).

NEWS LETTERS

CINCINNATI

CLYDE LEVI

CORRESPONDENT

THE wheat market remains active and firm, with a good demand from all sources quickly absorbing the offerings from day to day. There has been a fair percentage of No. 2 and No. 3 wheat among the receipts for which an excellent milling demand prevails. The market held an even tone with no important changes in prices in the closing days of August, but the underlying strength for good milling grades, which showed greater scarcity, favored higher prices. Receipts showed some falling off during the last week in August, but these picked up again during the first week of September.

Both speculative and cash corn markets were dull and lower during the early days of September, traders mainly awaiting fresher news and inclined to favor buying. The local situation was extremely inactive, and offerings difficult of sale even at concessions. The market suffered losses of 10 cents to 12 cents per bushel during the last week of August, as the result of an indifferent demand and declining inclination of futures. White grades especially were dull and had to be carried over from day to day for want of bids.

The weakness of corn was to some extent reflected in oats, but a good demand throughout the last week of August had a fairly sustaining influence and declines were only slight. In the early days of September, the market was fairly supplied, but active buying by elevator and retail feed interests held the market to a steady basis and prices were maintained to a fraction higher for good heavy weight quality.

There was a radical change in the hay situation the last week of August, with losses of from \$4.50 to \$5 per ton for timothy and \$3 to \$4 for mixed, but the market reached a better position by the reductions, giving more stability and promising a revival of Southern shipments, as present values are again in line with competing markets for this trade. Before the declines the market was featured by new high record prices for clover, a car of which brought \$36.75 per ton, the highest ever known in this market. In the early days of September, race riots in the yards largely constituted delayed shipments, but the accumulation in the terminals was being rapidly reduced, and the market is expected to be relieved of all congestion in the next few days. Trading is brisk. The Hay and Grain Exchange has decided to again hold two sales at the plugging tracks, the double sale going into effect September 9. This is being done in a further effort to reduce congestion. The market in millfeed is weak and inactive. Rye is firm, barley nominal.

Plans have been completed whereby the Cincinnati market will become the largest hay plugging market in the country. The Board of Directors of the Cincinnati Grain and Hay Exchange have appointed E. A. Fitzgerald, W. R. McQuillan, George Keller, E. H. Heile and J. E. Collins, Jr., as a committee to act on the extension made to the plugging facilities. The Board has authorized contracts with the Louisville & Nashville Railroad for the extension of the present trackage facilities afforded for hay cars in the Race Street yards. The improvement includes the extension of one track and a widening of the roadway so that there will be additional plugging facilities for 37 cars. With this addition, the Exchange hay plugging market will have a capacity of 100 cars a day. The extension was made necessary because of the extraordinary hay crop this year, which will be compelled to move through Cincinnati in order to reach the Southern markets.

E. P. Terrill, president of the Cincinnati Grain and Hay Exchange, has issued a call for a membership meeting of the Exchange to be held on the evening of September 18. At the meeting a report will be received from the Committee on Revision of the By-Laws proposing a rule providing for transfer of memberships. At the present time no one can become a member of the Exchange unless he pays an initiation fee. Under the proposed plan, certificates of membership are transferable to any person engaged in the grain, hay, feed or milling industries, whose credit and reputation are good.

When the Cincinnati Chamber of Commerce foolishly allowed the hay and grain men to leave their organization and repair to the Gwynne Building to conduct their exchange there, they certainly did not

know what they were about. But they have come to their senses after more than a year and now are appealing to the members of the Hay and Grain Exchange to come back to their "first love." But it is doubtful if the appeal will bear fruit. A committee of the most prominent members of the Chamber of Commerce has been appointed with a view to inducing the organization to come back into the folds of the Chamber. The hay and grain men withdrew from the Chamber of Commerce about a year and a half ago and established an independent exchange. The withdrawal was made after the Chamber of Commerce refused to grant them the right to have control of the affairs that were wholly within their province. The proposition to return to the Chamber of Commerce will be taken up at a meeting of the Hay and Grain Exchange called for September 18. If left to a vote of the entire membership of the Exchange, it appears doubtful at this time if the Exchange again will be a part of the Chamber of Commerce organization.

Six suits against railroads entering Cincinnati have been filed by the Early & Daniel Company in the Cincinnati Superior Court seeking judgments for refunds of freight charges because of alleged delay in transportation, loss of weight in transportation and losses by leakage in transit. The plaintiff company seeks to recover a total of \$6,815.59 from the railroads.

Members of the Cincinnati Stock Exchange have organized a "Grandpas Club," with W. E. Hutton, H. M. Beazell, M. E. Moch, Claude Ashbrook, Frank H. Ballman, Benjamin Bartlett and Gus Vos as members. Mr. Hutton is the president; Mr. Ashbrook, vice-president; Mr. Moch, secretary; Mr. Ballman and Mr. Bartlett, directors.

Expectations have been voiced by the Railroad Administration officials here that the car shortage will clear up in the near future. Factors leading to this are the return of the shopmen to work and the return to this section of empties that went East loaded with grain. Some railroad officials believe that few of the box cars that were sent to the seaboard with grain will be available for other purposes as only about one-fifth of the grain crop has been moved.

Joseph F. Costello, who has been rusticated for more than a month at Manitou Springs, Colo., has returned and resumed business at the Grain and Hay Exchange. During his absence he recovered 10 pounds of weight which he lost during a protracted illness.

J. J. Schuh, executive secretary of the Cincinnati Grain and Hay Exchange, has been advised by H. D. Irwin of the United States Grain Corporation that storage premiums will not be added in the Cincinnati zone to the basic wheat prices in the buying scale until the Grain Corporation has accumulated sufficient reserve of wheat to assure a measure of protection for future domestic requirements.

The record of the Inspection Department of the Grain and Hay Exchange of the number of cars inspected during the month of August, this year, reflects a very flattering condition, as compared with the month of August a year ago. During the past month, 1,496 cars of wheat were inspected, while 1,384 cars were inspected during the same month last year. During the month of July, 1919, the department inspected 1,454 cars, and the succeeding month, compared with this record, indicates an increase of 42 cars over the month of July this year. Since the heavy movement of wheat this year, 454 cars more have been handled than during the same period last year.

Among recent visitors at the Grain and Hay Exchange were H. Humphrey of Chattanooga, Tenn.; J. Crum, Delaware, Ind.; D. Vaughn, Minneapolis; R. R. Bules, Circleville, Ohio; R. E. L. Wilson, Greenup, Ky.; Barney Smith, Knoxville, Tenn.; C. W. Dils, Aurora, Ind.; John C. Williams, Nicholasville, Ky., and N. Squibb, Lawrenceburg, Ind.

Alfred Brandeis, of the United States Grain Corporation, after a conference with B. H. Kroger, large bread manufacturer of this city, is convinced that a 5-cent loaf of bread is possible. Brandeis came to see Kroger after the latter had announced that if the price of wheat is reduced to \$1.46 Kroger will sell a one-pound loaf of bread for 5 cents and perhaps less. Director Barnes, of the Grain Corporation, previously had stated that one-pound 5-cent loaves of bread could not be restored, even if bakers got flour for nothing. Brandeis, after an hour's con-

ference with W. H. Albers, secretary of the Kroger Company, went away convinced the old time 5-cent pound-loaf is possible at lower wheat prices. At least, Kroger can do it. The cost books of the Kroger Company were opened to Brandeis so it was revealed just what each process in the making of a loaf of bread costs, to a fraction of a penny. It was proved to him that the Kroger method of factory organization and distribution made it possible to bake one-pound 5-cent loaves at a profit, provided the cost of wheat is reduced. Duplicates of cost sheets were given Brandeis, who will include them in a report to be made to the United States Grain Corporation. Mr. Kroger would have the Government guarantee of \$2.26 a bushel for wheat removed and a lower price fixed, the Government to pay the difference between the \$2.26 and the new fixed price.

John Fisher, venerable Cincinnati grain merchant, is a lover of pawpaws, when they are right for human consumption. Monroe Izor, flour merchant, knows John's weakness for this luscious fruit. So on Monday, September 8, Monroe surprised John with the finest selection of his favorite luxury, the first of the season, which Mr. Izor gathered on his own place. Mr. Fisher pronounced them "better than perfect, and the finest I have ever seen and I hope my dear friend brings in some more."

INDIANAPOLIS

MURRAY E. CRAIN - CORRESPONDENT

THE Indianapolis grain trade has been in a slump recently, due to several factors, chiefly the investigation into the high cost of living and the car shortage. The fluctuating market also has played some share in the slowing up of business. As a result of the business depression caused by wild newspaper reports and which accompanied the inquiry into costs, mills are far from a full time basis in this territory, and demand for grain has tapered off proportionately. The car shortage is as pronounced as ever, and many grain men are not backward in declaring it due to faulty management of the railroads.

The lower tendency of the market has emphasized the inclination of farmers to hold on to their grain. A delicate situation has resulted. A further slump might mean the dumping of grain on a market which is in poor shape for its reception. However, farmers generally are regarded as being in good financial condition, and they are expected to hold on to their crops until they get satisfactory prices. Country elevators are jammed to the guards with grain, both because of the holding policy and the difficulty of getting rolling stock.

The permit system is under fire on the Indianapolis Board of Trade, general dissatisfaction being manifested over the new system. "Is the permit plan working smoothly?" was the question put to one grain man. "It never will," he replied rather grimly. While it is difficult for the local trade to judge results at the seaboard, unless a great deal of efficiency has been obtained there, the new system is a failure, it is declared. It requires 48 hours as a rule to get cars, and even this minimum is not always possible. Receipts for August showed a slump as compared to the same period in 1918, the figures being 4,969 cars in 1918 against 3,585 last month. August receipts were divided as follows: Wheat, 1,798 cars; oats, 998; corn, 601; rye, 61; hay, 118; barley, 9. However, September receipts are expected to run far ahead of those for the same month in 1918, the first 10 days of the month showing an improvement.

Isaac E. Woodard, secretary of the Acme-Evans Company, was elected to the Board of Governors of the Board of Trade at the September meeting. Mr. Woodard fills the vacancy created by the promotion of Edward D. Evans to the vice-presidency of the Board of Trade in July.

C. W. Wishmire, chief deputy inspector, has taken a membership in the Board of Trade, his accession being the only change during the month.

Agriculturists were given an opportunity to see how the Government tests their products at the State Fair, held in Indianapolis from September 1 to 6. An exhibit was arranged by H. A. Rhodes, Federal Grain Supervisor for District No. 12, but the results are not regarded as highly encouraging. The average farmer is interested more in prices than anything else, and he is exceedingly likely to look on tests for moisture and the like as hocus-pocus. However, Mr. Rhodes believes the farmer is slowly becoming educated to the fact that tests can give him a hint or two on how to improve his crops.

Corn is expected to bring up the crop average for the year in Indiana, despite the pessimism of some farmers. Wheat was slightly below the excellent

quality yield of 1918, and oats was even more so. Corn is suffering somewhat from the drouth, but advance reports are extremely encouraging nevertheless. A little seasonable rain will bring a crop, bumper both in quantity and quality, say Federal experts here.

* * *

Charles B. Riley, secretary of the Indiana Grain Dealers Association, is devoting his energies to the production of the 1919 directory of grain elevators and flour mills of the state. The volume will be out about November 1, according to present indications. It will contain about 160 pages. Numerous changes in the trade in Indiana have complicated the work, but at the same time have made it more valuable than ever before, and early orders for the directory have been heavy, particularly as it gives such detailed information as the railroad on which dealers are located, counties, etc.

* * *

The Indiana Grain Dealers Association will have about 75 members at the National convention at St. Louis, according to Secretary Riley's estimate. About 60 went to Baltimore and the same number to Milwaukee and the other cities which have entertained the conclave. Delegates will be appointed on the convention floor by the president of the Indiana association.

* * *

The McCardle-Black Company is to open a branch office at Frankfort, Ind., in the immediate future. The quarters formerly occupied by William Frank & Co., which came to an untimely end, will be utilized. Private wire service will be a feature. The addition gives the company two branches in Indiana outside of the metropolis and one in Illinois, exclusive of Chicago.

* * *

Elevator fire losses have been about normal recently. Three fires of some importance have taken place in Indiana during the past month, while some big losses have been noted in the West. One of the largest Indiana blazes was that which destroyed the elevator of the Kirkpatrick (Ind.) Grain Company, with a loss of \$50,000. The fire originated in the dust room. The elevator was conducted on the co-operative plan, 100 farmers being interested.

* * *

The Noblesville Milling Company won its fight for lower insurance rates, in the first hearing under Indiana's new law, which gives insurers the right to appeal from insurance rates fixed by companies. The company's Elevator "B" had taken the terminal rate, about 40 per cent higher than the tariff on elevators of a non-terminal character.

* * *

G. C. Bryant, Indiana field agent of the Bureau of Crop Estimates of the United States Department of Agriculture, has established offices in the State House, where he will work with the Indiana Legislative Reference Bureau in issuing monthly crop reports. Mr. Bryant had his office in the Federal Building for five years.

* * *

A. Waller & Co., of Henderson, Ky., have bought the 250,000-bushel Union Elevator at Evansville, Ind., and probably will move their offices to the Indiana city. The company's elevator at Henderson burned in 1917.

PHILADELPHIA

RALPH W. E. REID, CORRESPONDENT

THROUGH the loss of an order by a local grain exporting house for 1,000,000 bushels of grain, wanted by an European government, a movement is on foot in Philadelphia to force the railroads to provide better grain elevator facilities. Private enterprise would build new elevators here but the railroads reserve to themselves the right of supplying terminal elevators at tidewater. The order for the grain shipment was lost by the Philadelphia Export Company of which Wm. M. Richardson, with offices in the Bourse, is president. Commenting on the lack of grain elevator facilities, Mr. Richardson says: "We have great trouble to get permits for even small shipments of grain out of Philadelphia. Recently we had to wait about five days to get a permit from the United States Grain Corporation for a 50,000-bushel shipment, simply because the local facilities are not ample. A few days ago we received an inquiry from one of the European governments, to whom the company has made large grain shipments in the past, for 1,000,000 bushels of grain for delivery during September and October. In seeking a permit from H. D. Irwin, second vice-president of the Grain Corporation, it was found that no assurance of elevator facilities could be given. Consequently we lost the order and the purchasing agent arranged with exporters of Baltimore to ship the grain."

Philadelphia's grain elevators have about 3,000,000

bushels' capacity, the Girard Point Elevator having 2,000,000 and the Port Richmond Elevator about 1,000,000 bushels. George G. Omerly, president of the Hancock Grain Company, also complains of a lack of grain shipping facilities here. He says: "The need of the hour is a modern, concrete grain elevator at the Port Richmond terminal of the Philadelphia & Reading Railway. Private enterprise would build this elevator, but under the conditions surrounding the grain trade the railroad companies reserve the right of supplying terminal elevators at tidewater. The present structure at Port Richmond is a wooden affair constructed a number of years ago. The insurance rate is excessive, almost prohibitive, and storage facilities are exhausted when the elevator contains about 1,000,000 bushels."

Early this season a delegation of prominent grain dealers and exporters connected with the Commercial Exchange called on the Reading Railroad officials here to impress upon them the necessity of building a new grain elevator to take care of the increase in grain shipments to Europe. The Reading officials promised to take the matter under consideration and do what they could to relieve the situation. Up to the present time nothing has been done. The loss of the 1,000,000-bushel order by the Philadelphia Export Company has made the situation more acute and the grain exporters are expected to make further demands on the Reading Railroad for prompt action.

* * *

A. J. Dando, elevator agent for the Pennsylvania Railroad Lines, East, announces that no musty wheat will be received in the Girard Point Elevator except for drying and instructions from the Inspection Department of the Commercial Exchange, in the Bourse, will be considered sufficient orders to do so.

* * *

John B. Matthaef, traffic manager of the Commercial Exchange, has just returned from Washington, where as a representative of the Exchange, he conferred with Daniel C. Roper, commissioner of internal revenue, on the war tax on export grain.

* * *

The Quaker City Flour Mills Company, 3040 Market Street, Philadelphia, is building an eight-story grain elevator 22 by 25 feet, as an addition to its present plant. It will cost \$15,000.

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Pennsylvania crop conditions show the effects of the extremes of drought and heavy rains experienced during the last few months, according to the report of G. L. Morgan, field agent of the Bureau of Crop Estimates, Department of Agriculture. The yield of wheat is much lower than expected, due to plant disease, insects and storm damage. The yield for July was estimated at 86 per cent of normal compared with 94 per cent for the same period last year. Heavy rainfalls badly damaged the oat crop, making much of it over-ripe for harvesting. The yield is estimated at 81 per cent of normal. The condition of barley August 1, was 85 per cent of the normal yield for the period. The yield is 388,500 bushels contrasted with 405,000, the July 1 estimate. The corn crop of the state was improved by abundant rainfalls, accompanied by high temperature. July production was 68,924,000, compared with 66,409,000 for June. The average monthly production for the last 10 years, is 58,369,000 bushels. The quality of this year's rye crop is 91 per cent of normal and the yield 4,128,000 bushels, as compared with 4,773,000, the July 1 estimate.

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Raymond J. Barnes, of the Philadelphia Export Company, with offices in the Bourse and G. W. Heyman, 366 Broadway, New York, have been proposed for membership in the Commercial Exchange.

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The Grain Committee of the Commercial Exchange is notifying the members of the Exchange of a new schedule of charges for inspection of grain which will become effective September 15. These new charges supersede those which have been in force since May 13, 1918, and are virtually in all cases 10 cents a car or bushel higher than those now obtaining. The new schedule is as follows: Inspection on cars inbound, 50 cents per car for export, 60 cents per car for domestic. Cars inspected out of elevator, 60 cents per car. Grain inspected out for export, 45 cents per 1,000 bushels. Grain inspected afloat, 75 cents per 1,000 bushels, domestic or export. Minimum charge, 75 cents. Reinspecting cars, either for export or domestic trade, 80 cents per car. Sampling cars, 30 cents per car. Opinions on samples, 40 cents per car to members of the Commercial Exchange and 75 cents to non-members. Mixing charges, 60 cents per 1,000 bushels; cleaning charges, 60 cents per 1,000 bushels; drying charges, 75 cents per 1,000 bushels; salvage grain, \$1.50 per 1,000 bushels. The inspection of cars outside of Philadelphia is left to the discretion of John Lynn, chief grain inspector of the Commercial Exchange, and the chairman of the Exchange's Grain Committee.

* * *

Commercial Exchange members have been notified by A. J. Dando, elevator inspector for the Pennsylvania Railroad Eastern Lines, that owing to the congestion at the Girard Point Elevators and the large number of cars of grain on hand to be dried that it

will be impossible to handle the two part sample grade cars now on the track, and it will be necessary to forward them to the Keystone Elevator for handling. For the present, Mr. Dando states his force will continue to handle as fast as drying operation permit the sample grade wheat loaded in cars in bulk without separation.

* * *

A. J. Dando, elevator agent for the Pennsylvania Railroad Lines, East, announces that until further notice no orders for mixture or mixtures will be accepted when all the cars to be used have been unloaded into the Girard Point Elevator and all house mixtures will be only from general stock grain.

LOUISVILLE

A. W. WILLIAMS - CORRESPONDENT

BUSINESS has been rather draggy with the grain houses of Louisville during the past month, due to the unsettled conditions in the grain market, and general dull movement. There hasn't been much feeding or milling demand for corn, and oats have only been in fair movement at best. There has been an active movement of seed rye, and there has been a steady movement of wheat to the mills, and to elevators for long storage. Weather conditions have been against crops all season, frosts in the spring having injured corn and wheat, and bad weather having held up corn planting, and injured young corn. Now the state is suffering from drouth; there has not been a good general rain in weeks.

* * *

The Kentucky Public Elevator Company, F. C. Dickson general manager, reported that it was being severely handicapped at the present time on account of the serious car shortage, which is resulting in the company only being able to ship a percentage of the grain which should be moving out. Millers report that they are having considerable difficulty, although they are loading all carts to capacity, and doing their best to aid the situation. It is reported that thousands of cars are out of commission due to lack of repairs, this condition being caused by the shopmen's strikes in August, and the fact that thousands of shopmen were laid off in June under orders of the Railroad Administration, which has been making an effort to curtail expenses. These men were replaced in late August, or rather some of them were replaced, many having gone into other industries and not being available.

The effect of the car shortage is especially noticeable in the coal fields, where mines are working two days a week, with the most serious car shortage ever known in the Kentucky and Tennessee fields. Coal is gradually increasing in value, and stocks as a whole are low, with every indication of a severe shortage this winter. Mills and elevators with stocking capacity have been buying during the month to take care of future operations.

* * *

Indications are for a 77,000,000 bushel corn crop in Kentucky, according to the August report of the Kentucky Department of Agriculture, released early in September. The yield per acre is estimated at 23 bushels, sectional runs being 16 to 32 bushels. General condition is given at 85 per cent, with some improvement over July. Drouth has cut down all crops. Cowpeas average is 76 per cent with condition 79 per cent. Soy beans, 84 per cent and condition 81. Buckwheat acreage is given at 50 per cent with better seeding in July than August. Alfalfa condition is given at 74 per cent, while the third cutting yield is estimated at slightly better than a ton to the acre. Pastures are burned up in some localities and are given at 73 per cent.

* * *

There has been a healthy demand for seed rye during the past month, although the rye is not being grown for the Kentucky market, which today is consuming very little rye, except in manufacturing stock feeds, poultry feeds, etc. There has also been a good demand for timothy seed for the past two weeks, with indication of a fair acreage. Reports from various sections of the state regarding wheat planting would indicate that the crop this season will run smaller in acreage, some counties reporting very little interest in wheat, due to high corn prices. There is some demand for good seed wheat, due to the very poor quality of much wheat raised this season.

* * *

Work has started on new fireproof buildings costing \$50,000 to replace the burned seed houses at the plant of the Cottonseed Products Company, Louisville.

* * *

Traffic representatives of nine railroads recently met with shippers at the Louisville Board of Trade to discuss the car shortage. General traffic conditions were discussed, and all members decided to favor a policy of capacity loading of all cars, along with prompt loading and unloading in an effort to do everything possible to prevent the car shortage from becoming

even more serious. It has been announced that the Board of Trade is installing a new auditing department which will check freight bills for all shippers connected with the Board in order to check up freight overcharges. This department will be of special benefit to the grain houses.

Albert Edinger, of Edinger & Sons, Louisville grain, feed and hay dealers, is one of several stockholders of the McCombs Producing & Refining Company, Louisville, which have filed suit in an effort to prove that several millions of dollars' worth of stock was voted to the organizers of the company as promotion stock, and that this stock had been illegally delivered to several men without value being received by the company.

During the past few days hay has been moving into the market more freely, receipts being about 20 cars average per day. There is a fair demand for timothy, and some demand for mixed hay, but clover is dull. Alfalfa is only in fair demand. Heavy hays will come later in the year. It is reported that Kentucky is steadily producing more and better alfalfa, which is making an excellent showing, and gradually crawling up in price to a near level with Western grades.

A recent report from Henderson, Ky., was to the effect that farmers of that section claim that there is more money in corn and hogs than in wheat, and due to the small yield on the past crop, which averaged around 15 bushels, the farmers are not planning to put in much wheat in Henderson County this year. Last year labor was scarce and high and the situation this year is as bad or worse.

Reports from Hickman, Ky., are to the effect that farmers in the delta lands of western Kentucky are putting in a wheat crop equal to that of the past year, and are busy breaking ground at this time.

A recent article in a local newspaper on the loss of business to Louisville concerns as a result of the prohibition movement estimated that Louisville grain houses lost \$7,000,000 annually in business in Louisville, based on consumption in 1917. The total loss in coal, cooperage, boxes, bottles, etc., was estimated at \$15,000,000.

KANSAS CITY

B. S. BROWN - - CORRESPONDENT

SENTIMENT at Kansas City in regard to corn prices, as at other terminals, has been strongly bearish for several weeks, due to the Government's fight against high prices, and the big declines in future prices have been the direct result. The favorable tone of crop advices from the states of big production, so far as influencing the future market is concerned, have been partially offset in this territory by the unfavorable progress of corn in the uplands of Missouri, Kansas, Nebraska and Oklahoma.

With the exception of occasional cars of hard or dark wheat, prices at Kansas City are practically at the guaranteed level. Declines the past few weeks range from 5 to 20 cents, with the range of prices on all grades wide and irregular, due to the varying condition of the wheat. A big sustained movement and a reduction in demand account for the weakness in the market. Mills have filled their initial requirements, spring wheat is beginning to move in volume and the visible supply in commercial channels is enormous, all of which has made buyers more complacent over the future.

The Grain Corporation on September 5 had about 7,750,000 bushels of wheat at Kansas City, the bulk of which was taken on warehouse receipts. Until the first of this month the Government had taken practically nothing on the open market, but since then has bought from 50 to 200 cars a day. The bulk of the wheat is red.

With the early movement of wheat swamping railroads and elevators, the shortage of cars became serious and complaints from shippers were numerous. Relief was promised after officials of the Board of Trade sent telegrams to senators from Missouri, Kansas and Oklahoma and to the Railroad Administration. The shortage of cars was attributed mainly to the unusually heavy movement of wheat to the Northwest and to the East and to the slowness with which cars were returned. In addition a large number of empty cars were diverted from the Southwest to the spring wheat territory.

At the time the new guaranteed prices for wheat grading lower than No. 2 were announced the market was weak and sellers were beginning to have difficulty in disposing of No. 4 and No. 5 wheat except at much larger discounts than indicated in the new

schedule. The prices became effective September 2 and several days before this the Board of Trade sent a request to Director Barnes to allow low grades to be turned over to the Government at the new prices. Not only was this refused but holders were advised that grain could not be held and cars arriving before September 2 would not be bought by the Government.

Robert Y. Smith, formerly with the Eugene Cox Grain Company, has accepted the position of manager of the recently organized Consignment Department of the Terminal Elevators Company.

In their annual ball game the "Fats" of the Kansas City Board of Trade defeated the "Leans" by the score of 12 to 3. "Bob" Smith of the Terminal Elevators Company, formerly with the Pittsburgh Pirates, was the winning pitcher and Cort Addison, president of the Addison Grain Company, the loser.

Work on the 1,000,000-bushel addition of the Norris Elevator has been delayed a little by labor difficulties and the new part of the plant will not be ready for operation until October 1, instead of September 15, as originally planned. Grain can be bought for the new elevator by October 1, and unloading facilities will be ready about a week later. The addition doubles the capacity of the plant.

A wider variation in strength and quality is shown in this year's wheat from Kansas, Missouri and Oklahoma than ever before, according to the annual report of the Southwestern Laboratories of Kansas City. The quantity of gluten in hard varieties generally ranges from 9 to 12 per cent, with a few as high as 14 per cent and the average 10.75 per cent. Soft varieties range from 6 to 10 per cent, averaging 9 per cent.

The appearance of new Texas corn on the market has been strongly felt at Kansas City. That state ordinarily is a buyer and at no time has had enough of a surplus to be able to send bids to markets as far north as Chicago, St. Louis and Kansas City, and in doing so this year it has upset the ordinary movement of corn. For several weeks demand for earlotts at Kansas City has been very dull, with the absence of trade from Texas and territory that Texas is supplying the feature of the market. Numerous requests for bids have been received by local firms, generally accompanied by samples, which, with the exception of one containing weevils, were of good appearance. Harry Gamage of the Moore-Seaver Grain Company, which has branch offices in Texas, said recently that the state had large quantities of corn for prompt shipment which probably would have to be sold to Northern terminals, as Texas had no storage facilities for it. Several small lots have been bought for delivery here the latter part of September.

The membership in the Kansas City Board of Trade owned by the Hall-Baker Grain Company in the name of L. W. Bixler has been transferred to Paul D. Bartlett of the same firm.

Wheat receipts at Kansas City in August totaled approximately 20,000,000 bushels, the largest showing ever made in any month at this market. Arrivals in July were 13,842,000 bushels and a year ago—the former high record for one month—slightly over 16,000,000 bushels. The average August movement to Kansas City is less than 10,000,000 bushels. The attractive premiums obtainable here during the early part of the crop movement was mainly responsible for the abnormally heavy shipments, receivers said. Due to Government restrictions, the movement in September is expected to show a substantial decrease from last month. Receipts of corn, 366,000 bushels, were the smallest ever reported in August and were only about one-fourth the arrivals of a year ago and less than one-third the average. Oats receipts about equaled the average, 1,056,000 bushels, but were less than half the arrivals a year ago.

Nearly 13,000,000 bushels of wheat had accumulated at Kansas City up to the first of the month, a new high record for this time of the year and only 2,000,000 bushels less than the high record reached last year in the middle of the crop movement. Congestion in elevators and railroad yards the first week in September was serious. The various regulations imposed by the wheat control committee, generally at the suggestion of the Grain Corporation and the Railroad Administration, failed to prevent an early rush to market wheat. At the outset the blanket permit system was imposed at Kansas City, the same as at other terminals, but as there was no congestion at the time railroads were allowed as many cars as they wanted. On August 21 the ruling was modified and a free movement from all country shipping points to Kansas City was allowed. Within a week elevators began to run behind and the blanket permit system was restored, to be followed a few days later by an absolute embargo against all shipments of wheat to Kansas City. In addition to the embargo wheat enroute to this market was ordered held up in order that it would not reach Kansas City and add to the difficulties already confronting elevators. At the time the embargo was imposed it was implied that it

would not remain in force longer than a few days, probably not longer than the second week in September. At one time there were around 4,000 cars of grain, mostly wheat, on track in Kansas City, waiting to be unloaded, and about as many more enroute. Adding to the difficulty of handling the excessive supplies of wheat is the recent reduction in demand for earlotts from the Northwest and the East and the delay in moving grain to gulf ports for export, which leaves this market with no immediate outlet for any appreciable quantity of its surplus. To relieve congestion the Grain Corporation has made arrangements to ship around 5,000,000 bushels of its wheat to Atlantic ports.

BUFFALO

ELMER M. HILL - - CORRESPONDENT

CHARLES KENNEDY, second vice-president of the United States Grain Corporation, depreciates agitation by union leaders and others to have the Government control of wheat lifted. He said that farmers' representatives are in Washington working to have the control lifted and added that they want the control lifted so that the price of wheat and flour would go up. Mr. Kennedy said that if the control is lifted prices would soar and he said he would not be surprised if the price of wheat would go to \$5 a bushel without Government control.

"Work is the only panacea for the high cost of living," Mr. Kennedy says. "The President may write messages, Congress may legislate, soapbox orators and blatherskites may complain, but the high cost of living will never become less onerous until the people work harder and take less pay. Higher prices are inevitable until there is greater production per capita than at present." In regard to the disclosures of great stores of foods, Mr. Kennedy says that stores of food in themselves are not evil, but it is the purpose for which they are held. "Within a day or two the people may read in the newspapers that the United States Grain Corporation has received 120,000,000 bushels of wheat but that does not mean that the interests of consumers have been injured," he declared.

The Queen City Seed Company has been incorporated under the laws of the State of New York and has opened a wholesale and retail seed store at 33-35 East Chippewa Street.

Fred J. Collins, manager of the Buffalo office of the Urmston Grain Company, was the guest of old-time friends in Herkimer, N. Y., on his vacation last month.

The proposal of the Great Lakes, St. Lawrence & Tidewater Association for the construction of a deep waterway from the Great Lakes to the Atlantic through Canada is not meeting with the support the promoters had expected. Grain and elevating interests at Buffalo and lower Lake Erie ports vigorously opposed the project. Emphatic dissent is expressed by grain interests in the Northwest where it was expected support would be obtained. Buffalo grain and elevator interests say that the business men of the United States, especially those in the grain trade, would not be reluctant to undertake with Canada the construction of a deep waterway through Canadian territory if that route was best. But grain men declare that route is not best and point out that better ways can be found.

The Buffalo Chamber of Commerce and the Buffalo Corn Exchange say that enlargement of the Erie Canal between Buffalo and the Hudson River would be far better for the grain interests than a deep-water channel from the lakes to the Atlantic by way of an enlarged Welland Canal and deeper channels in the St. Lawrence River. It is further pointed out that the Erie Canal between Buffalo and the Hudson River at Albany is capable of floating 1,000-ton barges, but no boats of this size have ever traversed the stream. These boats, it is declared, would load grain at the head of the lakes and operated in fleets, and could carry grain direct to Seaboard elevators along the Atlantic Coast.

Commissioner of Agriculture Charles S. Wilson in a communication to grain interests at Buffalo says Congress should make a large appropriation to be used in an attack on the European corn borer which has been found in extended districts of New York and other Eastern States. Commissioner Wilson says that unless immediate action is taken to check the further spread of the corn borer, the pest will spread to the great corn growing states of the Middle West. Entomologists recently made an inspection of the infested districts near Schenectady, N. Y., where the pest has done great damage. After the preliminary inspection the Federal and state experts were impressed with the urgent need for an appropriation from the Federal Government and say that every

assistance should be given for the destruction of the pest. From Albany, the commissioners of the Department of Agriculture and entomologists went to Boston, Mass., where they inspected the infested districts of Massachusetts.

"There was delay in fighting the brown tail moth, the boll weevil and other destructive insects," Commissioner Wilson says in his letter to local grain men urging their support in his efforts to get an appropriation with which to fight the pest. "The result was that they continued to thrive and were most destructive. It is evident that prompt action in the case of the corn borer is imperative. The country cannot afford to delay, since the corn crop of the country is worth more than \$3,500,000,000."

Desire on the part of grain shippers to avoid loss in weight by fanning dust from the grain, was the reason advanced by T. S. Harvey, mechanical superintendent of the Canadian Government grain elevator at Port Colborne, for the explosion which wrecked the concrete structure and caused the death of nine men, August 9. Mr. Harvey made the statement at the inquest conducted by the Crown Attorney of Welland County. Superintendent Harvey said that while dust fans were in operation at the time of the explosion, the leads to the various lofts were closed. The only lead open was to the scales. Superintendent Harvey said he never had any leads open when taking in grain except by special slides. Mr. Harvey said that if the leads had been open between 50 and 60 per cent of the dust would have been taken away, thus materially lessening the danger of an explosion.

Plans are being made by the Dominion authorities for rebuilding the structure. Only the outside concrete walls are standing. These may have to be razed. The elevator had a capacity for 2,500,000 bushels of grain. The total loss is estimated at \$1,500,000.

The movement of grain to Buffalo this season from Lake Michigan ports is about finished, in the opinion of members of the Corn Exchange. It is generally believed that the movement of spring wheat down the lakes to terminal elevators will be somewhat late this season. There was a goodly quantity of grain in Buffalo elevators September 10 and it is being moved forward to the seaboard at a steady rate. Not more than 13,000,000 bushels of grain are now being held in storage here. Many Canadian boats have been unloaded here since the destruction by fire of the Canadian Government elevator at Port Colborne. Among the Canadian boats carrying grain from Buffalo this month are the *Toltee*, *Yorktown* and *Langell*. These boats were bound to Montreal. They formerly loaded their cargoes at Port Colborne. Grain receipts this year, while a little better than a year ago, are not equal to three or four years ago.

George E. Pierce, prominent elevator operator and grain merchant, played a prominent part in the campaign of the Boy Scouts of Buffalo to enlist adults as associate members of this great boy's movement. Mr. Pierce was a member of the Executive Committee and solicited the subscriptions among the city's grain and elevator men, most of whom joined up as associate Boy Scouts.

ST. LOUIS

R. O. JOHNSON - CORRESPONDENT

LIKE other important grain markets, St. Louis has experienced a wide break in corn, future prices showing 40 to 47 cents under the high level of less than 60 days ago, with the most severe depreciation registered in the September option, which at one time commanded such a wide premium over the more distant deliveries. Trading has been influenced largely by the movement for lower living costs, the severe break in hog and pork prices, weakness in foreign exchange which has interfered with export business, and the recent Government report which showed a crop of over 2,800,000,000 bushels, and lifted the total some 70,000,000 bushels over the forecast of the month before.

While the decline has been on, sentiment as to the future has been decidedly bearish, but in the last few days some of the most rampant bears are expressing the opinion that the future may have been more than discounted, and are pointing to several factors in the situation that may very shortly change. Chief of these is the foreign exchange situation, which has played a very important part in the recent price decline. Many well-posted grain men declare that England could right the foreign exchange market very quickly if she desired, and assert that the present low price of the pound sterling has a tendency to keep American products at home, cause an accumulation of supplies and force prices down where England can buy large amounts of corn and oats for future shipment at prices very much cheaper than if she supported the Exchange markets.

Furthermore, traders assert that in keeping Ameri-

can supplies at home England is helping her own industries, and is expanding her trade with Continental countries, in an endeavor to catch up in her markets lost during the war, and get ahead of the Yankees who have laid plans to secure much foreign trade, only to see these plans largely interfered with by low exchange rates and lack of credits to permit big buying in the American markets.

It is generally believed that should large and needed credits be advanced to German bankers by American interests, that a strong rally will result in the grain and hog markets, as Germany is known to be in need of enormous amounts of fats and cereals. Even the rumor that such credits had been arranged sent the market rallying sharply one day recently, and gave an indication of what might happen to the shorts should big New York banking interests finance the credits. The farmer has had the best of the game for several years, and now is the sufferer in the declines in prices of food products, but the farmer now is wealthy, and the question arises whether he will sell his grain at very much lower prices or hold it off the market.

Certain it is that food supplies will be in urgent demand in all of Europe when the winter arrives; and many traders believe that Herbert C. Hoover, on his arrival in the United States, will not only voice this belief, but will urge on bankers the necessity of arranging credits for financing purchasing requirements of Germany and other important foreign nations.

Members of the St. Louis Merchants' Exchange, on September 15, will vote on several amendments to the rules. Among these is an amendment relative to admission of employes which is expected to bring on a big fight by some of the older workers in commission houses, as they assert that it gives the firms a chance to replace them with minors, and consequently obtain the services of employes much cheaper than at present. The contested amendment reads:

Members of the Exchange desiring admission to the floor of the Exchange for minors in their employ, can, on application to the Secretary, subject to investigation and report of the Membership Committee, and approval by the Board of Directors and the payment of a sum equal to the annual dues, secure a ticket of admission for such minor, for the current year, to transact business for the member, or for the firm said member represents; but the minor, so admitted, shall not be allowed to transact business for himself or for any other person except the member applying for such admission, or his firm. The privilege thus granted to the minor shall be revocable at the pleasure of the Board of Directors.

The following important amendment to the rules of the St. Louis Merchants' Exchange will be voted on by members at a special election Sept. 15.

Until the number of outstanding membership certificates shall be reduced by purchase, redemption or forfeiture to five hundred (500), the Board of Directors shall hereafter, at their first regular meetings in the months of January and July, respectively, fix the redemption value of such certificates, which shall in no event be less than the amount ascertained by dividing the valuation of the assets of the Exchange, as shown by the last report of the Treasurer of the Exchange, by the number of membership certificates outstanding, and the sum so fixed shall be the amount to be paid by the Exchange for all certificates presented for purchase or redemption by the Exchange, until duly changed by the Board of Directors in accordance herewith. Hereafter, upon the death of any member of the Exchange, the legal holder of the certificate of membership, standing in the name of such deceased member, may present same to the Exchange for redemption and cancellation, and within sixty (60) days after such presentation, with satisfactory proof of death, the Exchange shall pay to said legal holder a redemption value to be fixed by the Board of Directors in the same manner as provided for under the first paragraph of this section, for the period during which time such death has occurred, deducting any dues unpaid for said calendar year. Until the membership is reduced to five hundred (500) in number, a redemption value not less than the amount as shown by the last sale of a certificate, reported to the Secretary as provided for in Section 2, shall be paid to the legal holder of the certificate of deceased member. Until such time as the membership is reduced to five hundred (500) in number, no such certificate of a deceased member shall hereafter be transferable except to a member or employee of the firm or corporation continuing the business with which the deceased member was connected, and otherwise qualified for membership, under the rules of the Exchange.

George Powell, of the Powell & O'Rourke Grain Company, St. Louis, in an effort to find the truth in reports circulated on the Merchants' Exchange of very cheap offers of corn, and liberal supplies, in sections of Iowa, sent out many letters requesting reports on these two points. The replies showed that the cheap offers must have originated in the fertile imagination of some eleventh-hour bear, and that so far as supplies are concerned it is very doubtful whether they are nearly as large as recently reported.

Announcement here this week that the Government would increase its efforts on behalf of the St. Louis Exposition of Industries, Arts and Crafts, which will open October 15, for four weeks, at the Southern Hotel Building, has caused renewed interest in the undertaking. Grain men and millers generally are actively supporting the enterprise. Among the firms on the roll of the affiliated committee on exposition attendance, are Elmore Shultz Grain Company, Goffe & Carkner Company, Marshall Hall Grain Company, Ballard-Messmore Grain Company, Hunter-Robinson

Milling & Grain Company, Hubbard & Moffit Commission Company, Auman-Burg Milling & Grain Company, Kehlor Flour Mills Company, Bernet, Craft & Company, Langenberg Bros. Grain Company, National Feed Company, J. H. Teasdale Commission Company, Veninga-Smith Grain Company, Lowell Holt Company, and Icentert & Watson Grain Company.

William Seelc, of Seele Bros. Grain Company, recently returned from a 1000-mile trip through the Rocky Mountains in an automobile. Mr. Seelc and several friends hired the automobile and drove for days through the mountains. On one day, when Mr. Seelc saw by the papers that it was 90 in the shade in St. Louis, the party was in a snow storm that lasted for several hours. Mr. Seelc told his friends on his arrival home that he thought of them when the snow was falling. One day recently, the Seele Bros. Grain Company received the largest car of wheat ever shipped into the St. Louis market, and said to be the largest car ever loaded.

Eduard M. Taylor, one of the oldest members of the St. Louis Merchants' Exchange, has been elected an honorary member of the organization. Mr. Taylor was elected while sojourning at Petosky, Mich. He makes his offices with Morton & Co. in the Exchange Building.

MILWAUKEE

C. O. SKINROOD - CORRESPONDENT

THE Chamber of Commerce of Milwaukee seldom fails to show its patriotism in season and out of season. This was manifested recently when the heartiest telegram of welcome was dispatched to New York for Gen. J. J. Pershing to be handed to him as he alighted on American soil again. Milwaukee grain men not only helped to put over Liberty loans in a big, liberal American way, but they also observe the niceties of patriotic occasions, as was shown in the sending of this telegram.

One of the oldest and best known of the members of the Milwaukee Chamber of Commerce, Frederick Layton, died recently. He had been a member of the Milwaukee Chamber since 1863 and had always taken a keen interest in the affairs of the Milwaukee grain men. He was one of the first important and well-known packers of meats in Milwaukee and during the last 15 or more years he has been known as Milwaukee's leading philanthropist. He made every effort to give away nearly all his money during his life time and almost succeeded. He founded and supported the Layton Art Gallery and other institutions for the benefit of the community in general.

Milwaukee grain dealers are branching out to other cities more and more—the latest instance being the incorporation in Chicago of the Edward R. Bacon Grain Company to succeed Edward R. Bacon, for years a prominent grain merchant on the Milwaukee market. Two of Milwaukee's best known grain men, P. P. Donahue and Harry M. Stratton, become allied with the new concern. The list of officers is as follows: President, Edward R. Bacon; first vice-president, P. P. Donahue; second vice-president, Harry M. Stratton; secretary-treasurer and general manager, Edward R. Bacon, Jr. The company will run the Keystone and Wabash Elevators in Chicago with a combined capacity of 3,000,000 bushels and the Grand Trunk Elevator at Collingwood. Mr. Donahue is one of the former presidents of the Milwaukee Chamber and Mr. Stratton is the present head of the Chamber of Commerce.

Milwaukee grain men are also taking an active part to determine future grain rates, it having been decided that the Chamber shall be represented at the grain rate hearings in Washington in September. George A. Schroeder, head of the Grain Men's Traffic Bureau, Albert R. Taylor and A. R. Templeton have been designated to represent Milwaukee's interests at the National capital. A general revision upward of rates on grain and grain products in the Northwest is being contemplated and every report will be made to head off this raise if possible.

Among the members of the Chamber of Commerce recently elected are the following: Frederick P. Goodrich, Edward C. Christl, Carl W. Gerstenberg and Arthur K. Emrich.

Reports received at Milwaukee from the Railroad Administration officials here indicate that there is a serious shortage of box cars. Tests have shown that the average loading of wheat has dropped from 40 tons a car last year to 37 at the present time, while the average loading of grain products, including flour, has declined from 35 tons per car a year ago to 30 tons at present, a loss of about five tons per car. If cars were loaded as heavily as last year, the Railroad Administration says, there would be no

real shortage of freight cars. A special campaign will be inaugurated to get shippers to load their cars as carefully and as conscientiously as they did during the war, so that the troubles which now threaten to retard the movement of grain may be avoided at least in large measure.

Secretary Harry A. Plumb of the Milwaukee Chamber declares that all signs now point to a very prosperous season for grain men and business generally this fall. He points out that one of the best signs is that the receipts of grain here are on the increase, while the local consumption of grain is also growing by leaps and bounds, making this an exceptionally good market for shippers to patronize. Nearly 50 per cent of all the grain received here is being used for consumption in the city according to Mr. Plumb.

The E. P. Bacon Grain Company, which makes a special investigation of the barley crop each year, reports that 475 correspondents have sent in figures indicating that on the average there will be a decrease in production this year due to the smaller acreage and the consequent lighter yield. The Wisconsin reports show that the barley berry is light weight and shrunken and only a small percentage of the grains are plump due to the extremely hot weather when the grain was filling. The color is uneven with about two-thirds of the grain more or less discolored, but there is little evidence of unsoundness. The barley acreage went down on the average about 21 per cent according to these figures. The yield of barley in the state is also low, being put at 21 bushels, or about 11 bushels per acre less than a year ago.

Wet and hot weather also caused material damage to barley in Minnesota, the report shows, the berry is light weight, usually lacking plumpness, the color is not desirable, while little grain is unsound. The acreage also dropped in Minnesota, according to these figures, about 25 per cent. The yield averages a little over 19 bushels an acre, or about 12 bushels less than a year ago.

Iowa barley is much like that of Wisconsin and Minnesota, light and discolored, with a cut in acreage of 24 per cent compared with the previous year and with the average yield at 25 bushels an acre, or about eight bushels less than a year ago.

Similar conditions prevail in South Dakota, judging from these reports, with little unsoundness in the grain. The yield in that state is put at 22 bushels an acre, a cut of about seven bushels an acre from last year.

The report of the Bacon company on the barley crop is one of the most valuable sources of information each season on the yield. The above excerpt from the report gives some idea of what to expect from the barley crop of the Northwest this season.

P. P. Donahue, one of the leading grain men of the city, has been delegated to represent the Chamber of Commerce at the big industrial conference called by Illinois manufacturers in Chicago. Mr. Donahue will represent the Grain Dealers National Association.

TOLEDO

H. F. WENDT - - CORRESPONDENT

MEMBERS of the Toledo Produce Exchange recently petitioned Julius Barnes, wheat director of the United States Government, in an effort to have more cars furnished the Toledo territory which comprises northwestern Ohio and eastern Indiana and Illinois.

The members asked that Barnes use his good offices with the Railroad Administration, which it is charged, was apparently showing discrimination in furnishing of cars for the movement of grain.

The telegram stated that Minneapolis had 554 cars on one particular day, Chicago, 947, Kansas City, 620, St. Louis, 373, while Toledo had only 49 cars.

Reports from 28 shippers, on the morning of that particular day, in the Toledo territory asked for 315 cars to move the grain.

John B. DeLany, of E. W. Wagner & Co., Chicago, is relieving T. C. Burke, manager of the Toledo branch office, who is spending his vacation in the Adirondack Mountains. DeLany is a former A. E. F. man.

Stocks of seed held in Toledo September 1 were: Red clover, 1,157 bags; alsike, 3,502 bags; timothy, 69,654 bags. Stocks held September 1, 1918, were: Red clover, 1,669 bags; alsike, 5,172 bags; timothy, 77,954 bags.

Northwestern Ohio elevators may be obliged to discontinue buying wheat from farmers unless the United States Grain Corporation re-establishes Toledo as a buying center.

The elevator men say that they get few cars for shipping grain and are obliged to buy with the prospect of holding it for an indefinite period. Under the arrangement in effect last year, Toledo was a buying

center and the Government designated this city as a special delivery point for cars. Because the wheat could be moved quickly, local elevators were able to buy from the outside elevators relieving congestion.

Members of the Northwestern Ohio Elevator Operators Association, at a recent meeting here, adopted a resolution requesting the Grain Corporation to make Toledo a buying point again and agreed to send a petition at once to the Grain Corporation heads.

Frank I. King, of C. A. King & Co., who for four months was confined to his bed by an illness, is greatly improved and recently spent a few hours on the floor of the local Exchange. Handshaking was more important than bidding on the day of his return.

Miss A. E. Reese, of Taylor & Bournique, Milwaukee, one of the few women grain traders in the country, was in Toledo recently, buying wheat of local concerns.

The regular monthly meeting of the Northwestern Ohio Co-operative Association was held September 8 in Toledo. The members were the guests of the Toledo Produce Exchange members at a dinner which preceded the meeting.

NEW YORK

C. K. TRAFTON - - CORRESPONDENT

MEMBERS of the New York Produce Exchange recently received a circular letter from the Board of Managers requesting an expression of opinion as to the advisability of inaugurating an additional news service on the Exchange floor. Some three months ago a petition signed by 139 members was received by the Board, requesting that a board for quotations of stocks, cotton, coffee and sugar be installed. This was referred to a joint committee consisting of the Floor Committee and the Committee on Information and Statistics. After a thorough canvass of the situation, the joint committee reported on August 7 that in their judgment the question was of such importance it should be referred to the membership for ballot. If the members approve, the Board will, upon further consideration, determine whether they deem it to be in the best interests of the Exchange to make the installation. Accompanying the letter was a circular, signed by about 30 firms and individuals, strongly advocating this new service.

While the Board of Managers has acceded to the petition to the extent of calling for the vote of the members it is stated by some of the most conservative and influential members that the majority of the Board is personally strongly opposed to the proposition. It is pointed out that the Exchange was not chartered for the purpose of stimulating interest or promoting trading in stocks, cotton, coffee and sugar and that the installation of this service will be of no help to the legitimate business of the Exchange for which it was organized. It is estimated that the cost will be at least \$10,000 a year and that the benefits, if any, will go to outsiders. Indeed, it is alleged by one prominent member that some of the signatures to the petition and the supplementary letter were merely added as a matter of courtesy and not because of interest in the matter.

Practically every member of the Produce Exchange, and especially those in regular daily attendance on the floor, were greatly interested to learn that John F. Ince had become identified with B. F. Schwartz & Co., Inc., members of many of the big exchanges of the country, whom he will represent on 'Change, assisting in handling business over the firm's private wire to the Chicago Board of Trade. During the past 35 years Mr. Ince has been connected with the Exchange in various capacities, for the last 19 years as superintendent of the great trading floor. As a consequence he has become well and favorably known to virtually all the members. He received the hearty congratulations and best wishes of many of the "regulars" who have been greatly impressed by his high standard of business principles as displayed in the numerous offices he has held. Charles Mallette, for a number of years connected with B. F. Schwartz & Co., Inc., commission merchants, latterly as manager of the firm's private wire on the Produce Exchange, severed that connection last month.

The Board of Managers of the Produce Exchange has taken favorable action on the following applications for membership: Percival Carruthers Band, of James Carruthers & Co., Ltd., grain merchants of New York, Montreal, Winnipeg, etc. Mr. Band is a son of Charles S. Band, manager of the firm's New York office, and is a veteran of the great war. He was a captain in the Canadian Overseas Forces and was awarded the Military Cross for gallantry in action. Although wounded in the ear, he refused to leave the front, but insisted on leading his men over the top and took three lines of German trenches. Other applications

for membership favorably acted upon by the Board of Managers were: Edward J. Rose of Robinson & Sweet, grain exporters; Charles B. Crofton of Lewis, Proctor & Co., Inc., grain merchants; James K. Genung of the American Hominy Company, corn products; Graham A. Murray, Farmers Overseas Company, grain exporters. For three and a half years Mr. Murray was connected with the local grain firm of Parker & Graff, successors to the old house of Parker & McIntyre.

Frank J. Losee, for several years connected with Parker & Graff, grain merchants, but now identified with Schilthuis & Co., grain exporters, has made application to transfer from an associate to a regular membership in the Produce Exchange.

C. S. McKinstry, for several years connected with grain and cereal interests in New York, but latterly identified with out-of-town concerns, was on the Exchange floor for a short time last month and stated that he would probably return to the local market in the near future.

Many members of the grain trade on the Produce Exchange attached their signatures last month to the following communication addressed to the Chicago Board of Trade: "In the opinion of the undersigned members of the New York Produce Exchange there should be an active trading month established between December and May, as the period between December and May is so long that an undue amount of trading is concentrated on the month of May. This should apply to corn and oats at present, and to wheat when unrestricted trading is resumed. We fully understand that there is no restriction on trading in any month, but our idea is to feature the month of March as an active trading month and have continuous quotations sent out as they are for the other active months."

Edward W. Bucken, representative on the Chicago Board of Trade for the commission firm of Knight & Co., left many friends behind him when he left New York several years ago and they were all sorry to learn that he had resigned his membership in the Produce Exchange, notice of its transfer having been posted on the bulletin board recently. Mr. Bucken was active and popular in the local market for many years as a broker for the old firm of Knight & McDougal, being highly esteemed because of his high business principles and kindly, gentlemanly deportment.

Paul H. Vilmar recently announced to his many friends on the Produce Exchange that he had made a new business arrangement, becoming representative in this market for the old Kansas City house, the Simonds-Shields-Lonsdale Grain Company. For many years he was connected with the grain export trade in this market, his last previous position being manager of the export department of James Carruthers & Co., Ltd., grain merchants of New York, Montreal, Winnipeg, etc. That connection was severed some time ago owing to the virtual elimination of civilian business in export grain. Because of the recent increasing activity among members of the grain trade, and especially exporters, Mr. Vilmar decided that it was time to get back into harness again. Because of his long and honorable connection in the trade he starts on his new duties with the most sincere wishes of a multitude of friends throughout the country.

Herbert L. Bodman, whose return from France with a fine military record was fully described in the July issue, was back at his old post on the Produce Exchange recently, prepared to resume his duties as president of Milmine, Bodman & Co., Inc., which was organized in 1917 to succeed the old grain firm of the same name. Mr. Bodman went to the Plattshurg Training Camp early that year and received a lieutenant's commission. In March, 1918, he sailed with the famous Seventy-seventh Division, and before he left France had been advanced to a captaincy.

Frank D. Wade, connected with the Chicago grain firm of Bartlett Frazier Company, spent two weeks on the Produce Exchange last month, having come east to manage the firm's New York office during the vacation of Guy Hamilton, their regular representative in this market.

Members of the Produce Exchange, but especially in the cereal goods and flour trades, were sorry recently to learn that their old friend and associate Lea Robeson, for many years prominently identified with corn products, etc., had retired from business and had been succeeded by Thomas M. Rossman, who was Mr. Robeson's chief assistant for several years.

Roger Roughton notified the members of the Produce Exchange early this month that he had reopened the local office of Sanday & Co., the old British grain firm. When The Wheat Export Company, Inc., was organized largely or wholly by the British Government to buy wheat, flour, etc. for the Allies, the old English firm was absorbed among others and Gerald Earle, their representative in this country, became president of the official buying organization, and it

was only natural that he should take Mr. Roughton with him. The latter joined the firm's Liverpool forces in 1903, subsequently coming to New York. He then went for a short time for the firm to India, and still later returned to the Produce Exchange. With the war ended, permission was granted to reopen this office for Sanday & Co. in anticipation of future business and The Wheat Export Company gave notice to the trade that Mr. Roughton had been released for the purpose of attending to the reorganization.

DULUTH

S. J. SCHULTE - - CORRESPONDENT

INCREASED space has been taken in the Board of Trade Building to accommodate Chief Deputy State Grain Inspector A. C. Smith and his staff. Members of the State Inspection Department are having an increased burden thrown on their shoulders through the large proportion of lightweight spring wheat and durum of this season's crop that is to be marketed from over the Northwest. Under the present Government regulations, the inspection is of an intensive nature, necessitating an analysis of all the samples coming in for review, so as to show their complete composition, texture, color of the grains, etc. The great bulk of the wheat and durum marketed here so far this season has been light weight, running all the way from around 51 pounds up. Only a few straggling cars a day of full weight grain have been coming in so far. It is noted though that while the kernels of wheat are light, they are generally bright and clean. The experience of millers at this point is that the light weight grain makes good flour, though rather dark in color. It may be mentioned that a force of 70 men is now employed in the Duluth State Inspection Department including inspectors stationed at Cass Lake, Thief River Falls and Sandstone out-stations. Had the wheat crop turned out as heavy as had been promised early, a much larger staff would have been required to handle its inspection.

Regarding the amount of wheat likely to be marketed and shipped to the terminals here, dealers and elevator men are unable to make even approximate estimates. The tonnage depends altogether on the policy to be adopted by the United States Grain Corporation, they assert. Up to date millers at Minneapolis have been attracting wheat to that point through offering heavy premiums, but it is assumed that this market will come into its own as soon as the milling interests down that way are filled up. So far, too, the Grain Corporation has been purchasing in the Twin Cities considerable light weight durum and spring wheat at the fixed price, and the query being asked is whether it will be stored down there or shipped up this way, to go down the lakes before the close of the navigation season. As has been previously mentioned, dealers here are counting upon the movement of barley and rye to the terminals here making up to a great extent for the falling off in the wheat harvest this season.

"It is too bad that heated term as far as western and central Minnesota is concerned, was not delayed for even a week. Had that been the case, thousands of acres of spring wheat over that ground would have returned good yields of plump grain. Wheat grades ran off from Nos. 1 and 2 Northern to lightweight stuff in the course of about two days," said Earl M. White of the White Grain Company on his return from an inspection trip. Yields of oats and other grain were also seriously affected in Minnesota through the hot weather coming on at a critical time. Mr. White declared that, in his opinion, the tonnage of hay harvested in this district this season was exceptionally heavy, and good markets are counted on for it owing to the shortage of grain and feeds in the country farther west.

Former employees of Duluth Board of Trade firms who had been in army service, are gradually assuming their old positions. Among memberships recently transferred were those of G. H. Spence to G. B. Hathaway, and of A. D. Thomson to G. P. Harbison. Mr. Hathaway is back with the Consolidated Elevator Company and Mr. Harbison on his old job as a cash grain buyer for A. D. Thomson. Max F. Rheinherger is back with the Standard Grain Company after two years' army service.

Julius H. Barnes, Federal Wheat Director, was a recent visitor on this market. In conversation with members of the trade here, he expressed the view that a gradual readjustment downward would be brought about in the general grain markets and the costs of living. He contended that wheat flour is the cheapest and most nutritious food in the list, and he drew attention to the point that consumers have not yet gotten over the habit of saving it as inculcated into them during the period when economy in this

country was necessary in order that sufficient wheat and flour might be left to supply Europe's war needs. He regarded it as satisfactory to observe, though, that the consumption of flour has been on the upgrade lately while the demand for meats has fallen off. Mr. Barnes' information shows that foreign buying of American foods is already falling off and a scaling down is likely to come steadily as Europe's production increases.

Few changes have been reported on this market lately in connection with Duluth grain houses. Jackson Bros. & Co. have been admitted to firm membership on the Board here, and the Hagen Grain Company to corporate membership.

With the exception of an increase from \$1.50 per 1,000 bushels to $\frac{1}{4}$ cent per bushel in rye commission charges for buying and selling grain for future delivery on this market are unchanged from last year. The scale has been fixed as follows—Wheat and barley, \$1.50 per 1,000 bushels, or multiple thereof; rye, $\frac{1}{4}$ cent per bushel and flaxseed 1 cent per bushel. When delivery of warehouse receipts is made on contracts for future delivery, an additional charge of $\frac{1}{8}$ cent per bushel is made for wheat and other food grains, and of $\frac{1}{4}$ cent per bushel for flaxseed.

Benjamin Stockman, president of the Board of Trade and manager of the Duluth-Superior Milling Company, have returned from a five-months' trip abroad during which he visited his old home in Scotland and made a run over to Belgium and Holland in order to study food conditions at first hand. He is of the opinion that Europe will require large quantities of American flour, wheat and other grains during the coming year as crops in nearly all the countries over there were below the average. He assumes however that exports of foodstuffs will be held down until the disturbed exchange situation has been restored to a more normal basis, or special financial arrangements have been made.

Operators on this market and the elevator interests at the Duluth and Superior are being faced by a serious shortage of grain ears. Several thousands of ears were shipped down to the Southwest by the Northwest roads and they have been slow in returning them. The consequence is that large quantities of grain are being held in interior elevators over the Northwest, which their holders desire to ship this way, and the grain movement is as a result being held down far below par for the season. The run of wheat this way is being held down to from 30 to 60 ears daily at the present, while last fall at this time, 600 and 700 ears a day were being handled. The falling off in the season's wheat yield and payment of high premiums up to date by Minneapolis millers and the ear shortage have been factors in slowing the movement down this season.

Rye has been the trading feature on this market for some time back. Operations in it have been on an extended scale, a considerable tonnage of that grain having been disposed of for Eastern delivery. Going a month back, the spot quotation in No. 2 rye has worked down approximately 8 cents from \$1.50 $\frac{1}{2}$ to around \$1.40. Considerable of it has been bought for shipment as soon as ears can be supplied by the railroads.

Interest in the barley market has died away with the withdrawal from its market of operators who had been prominent in it. Its range has dropped to from \$1.02 to \$1.32 as compared with from \$1.27 to \$1.40 a month ago.

INDIANA DISCUSSES H. C. L.

When President Wilson came to Indianapolis to make his address on September 4, the Indiana Committee on Food Production and Conservation presented to him the following memorial:

"To the President:

"The Indiana Committee on Food Production and Conservation was appointed by Governor Goodrich, in April, 1917, on the declaration of the war with Germany, for the purpose of encouraging greater food production and conservation. Upon his request, the Committee has continued its activities since the signing of the armistice.

"Following your address August 8 to Congress, on the High Cost of Living and the inauguration of a campaign by the Attorney-General, this Committee has held meetings, conducted investigations and has been exerting every effort to aid in solving some of the many complex problems. This Committee recognizes the unusual living conditions existing at this time and is convinced that efforts must be made to make it possible for our people to secure the necessities of life.

"A study of the situation in Indiana shows clearly

that the present agitation on the subject of the High Cost of Living and the drive for lower food prices is resulting in a material reduction in the production of foodstuffs by the farmers.

"Indiana is one of the leading winter wheat states of the Union. This past year more than 2,890,000 acres were grown, while the normal production is about 2,100,000 acres. Because of the uncertainty of markets for the crop for next year and the present high cost of fertilizers and scarcity of labor, it is doubtful if a normal acreage of wheat will be planted by Indiana farmers this fall.

"Preparations for cattle feeding on farms of this state are now held in abeyance. Farmers are hesitating to fill silos with high-priced corn and otherwise prepare for winter feeding when they are uncertain as to whether they can buy cattle and feed them out and secure a reasonable return for their labor and feed. Silos should be filled and corn put in the shock during the next three weeks, and a decision must be reached at once in the matter.

"More than 4,000,000 hogs are grown and fattened on the farms of Indiana each year. Hog breeders are now raising the question as to whether they should keep the usual number of brood sows. A large number of farmers have already decided to make a radical reduction in the number of breeding animals to be kept. A small reduction in the number of sows kept on each farm this fall will mean a tremendous reduction in the amount of pork in 1920. If only one less sow is kept on each of the 200,000 farms in Indiana, with an average production of five pigs each, the number of pigs would be reduced by 1,000,000. Estimating that each of these pigs, if produced, would be fed and would weigh 200 pounds, the total reduction in pork produced would be 200,000,000 pounds. In these respects Indiana does not differ from other states of the Middle West in which the surplus foodstuffs are produced.

"Inadequate supplies of foodstuffs to meet the unusual demand are responsible to a large extent for the present high prices of food. If conditions are to be bettered, the production of foodstuffs should be increased. Every encouragement and assurance, therefore, should be given to the farmers so that the program of production may go forward in a strong way.

"Up to the present time, the campaign on the High Cost of Living has been largely directed on food. It is appreciated by all that rents, clothing, recreation and many luxuries are taking the larger share of the income of the wage earner and the salaried worker. It would seem, therefore, that all the people should be encouraged and urged to reduce unnecessary expenditures along these many lines. The demand for luxuries, amusements and non-essentials is far beyond that of any previous time, and all of this causes the Committee to feel that people are giving undue attention to expenditures for food and are failing to economize and conserve along other lines, which is taking the larger share of their income.

"There is a general feeling among our farmers that the short hours of labor observed in industrial lines is militating against the efficiency on the farm and is reflected in the cost and volume of production. The same is true with all other activities in the preparation, handling and distribution of food consumption.

"The Indiana Committee on Food Production and Conservation respectfully calls these matters to your attention and urges that in all possible ways the attention of the public be directed to the essential needs for greater production, conservation, thrift and economy."

THE Kansas Public Utilities Commission has ordered that in case it is impossible for a railroad company to furnish sufficient cars to keep all elevators open, then cars shall be divided among such elevators in proportion to the grain actually delivered at such station. It is our further understanding of the order that grain held in the country not actually delivered is not to be considered in making division of equipment. This is intended to fully answer the many inquiries we are receiving from our members regarding the distribution of box car equipment.

BARNES REPLIES TO GRONNA

Julius H. Barnes, United States Wheat Director, today made public his reply to the statement issued by Senator Gronna, chairman of the Senate Agricultural Committee, on August 12, reflecting on Mr. Barnes and the United States Grain Corporation, in their administration of the Wheat Guarantee Act. Mr. Barnes' answer is contained in the following letter sent to Senator Gronna:

My dear Senator: I note through the public press your statement of August 12. I greatly desire, in the difficult problems of this office, the sympathetic co-operation of your Committee. Before this task of National Administration should be again embarrassed by charges of manipulation, tending to undermine public confidence, please grant me the opportunity to examine statements of presumed facts made before your Committee? In this case, was there proper effort at verification?

I refer particularly to your statement:

They should know that owing to manipulation in administering the grades and standards together with the damage done by hot weather to the maturing crops the winter wheat producers are receiving as low as \$1.15 per bushel for their wheat, not the \$2.05 which Mr. Barnes gives as a theoretical average, and that this year's crops may average not over \$1.50 per bushel.

That \$1.15 statement originated as the uneasy apprehension of a Kansas editor. It is as if, distracted, one anxiously sought insurance against one's home catching fire at the same instant that a cyclone wrecked it, lightning struck, earthquakes shook it, and a flood swept it away. All might conceivably happen at once, but it is not likely. Out of 80,000,000 bushels of wheat marketed in the Southwest since July 1, our records fail to indicate even 1,000 bushels of wheat so priced. Of 16,000 carloads of wheat received in Kansas City, only six cars sold below \$2.00, and the lowest was \$1.92. Less than 6 per cent has sold below the standard price for No. 3 at \$2.11.

As to the "\$2.05 which Mr. Barnes gives as a theoretical average." The Department of Agriculture gives, monthly, the actual average farm price received by the grower, including actual prices for damaged and inferior qualities. Those official reports allow the following calculations:

Crop of 1917—423,000,000 bushels, marketed at	
average grower price of	\$2.02
Crop of 1918—729,000,000 bushels, marketed at	
average grower price of	2.06

The weighted average for the two crops is \$2.0459, and was the basis for my statement.

As to the producer not receiving the full measure of the guarantee, it is interesting to note that the average farm price, July 1, was \$2.20, and on August 1, \$2.17, between which dates there was marketed 150,000,000 bushels, evidently at 12 to 15 cents, above the average price obtained during two years of the fair price control.

In view of this, the anxiety "that this year's crops may not average over \$1.50" seems premature.

The Wheat Guarantee is expressed in standard grades promulgated by the express direction of Congress. The guarantee is expressed in prices at certain market terminals, and to insure that a fair reflection of those terminal prices reach the producer at country stations, the same standards of quality must be used, or price comparison is impossible. The Grain Corporation asked the millers and dealers at country points to accept as final the judgment of this disinterested Government Agency in cases where the producer felt grades or prices did not properly extend to him that guarantee. For the first time in the age-long dispute between buyer and seller the producer can get a disinterested decision, binding on the buyer, at the expense of a postage stamp. To the credit of the trades, these contracts have been generally accepted, and the usual trade rights of individual judgment surrendered to the common good. The producer apparently is satisfied with his treatment, for with 2,000,000 wagonloads of wheat marketed, we have received, in all our offices, less than 100 appeals against grade or price offered.

If your suggestion is that the Grain Corporation prices on damaged wheat are relatively too low, fair discussion on that phase is welcomed. Those discounts are the judgment of 20 men of life-long grain experience, actuated by the same high ideal of national service as yourself. We aim to establish these discounts as generously as soundly possible in the relief of such producers as suffer from nature's disfavor and shall not hesitate to recast them when convinced of error. Nor shall we hesitate to provide correction and restitution by dealers in such cases as develop where the producer is not properly treated. The competition of thousands of individual mills and dealers affords additional security to the producer. This competition is real and active.

Nothing in many years of private experience and nothing in two years of experience in public control warrants me in accepting, without protest, such expressions as "manipulation in administering the grades and standards" or that "the producers are thereby defrauded and the consumers receive no benefit." It is a time for sobriety of speech and restraint

of statement. Nothing is gained by applying such terms to transactions made, with few exceptions, as the sincere expression of fair business judgment.

Surely, my dear Senator, your experience must run with my own; that the vast majority of men, be they millers, dealers, producers or consumers, are competent and fair, desiring no undue advantage, and taking none. When the sole test of honest business becomes real rascality in business and wide unemployment the entire absence of healthy profits, then certainly will walk hand in hand.

Last February, with the largest winter wheat acreage ever sown and with rosy crop prospects throughout the world, the producers of this country anxiously sought national legislation making the guarantee effective. No spring wheat acreage had been sown then and it was argued that, to that extent at least, the national guarantee should be regarded as a war contract and discarded as such. Our people, to their credit, insisted on nothing bordering on repudiation. One billion dollars was voted to make the producer secure and at the same time protect the consumer, should the development of a world price, fairly ascertained, justify resale at a lower level than the guarantee.

Today, reduced crops here and abroad indicate a world price level fully equal to the guarantee basis, and the consumer naturally is content to buy his bread on that level. The producer, secure at all times by the guarantee, should not insist he be allowed to seek a better market, without regard to the consuming public, lately facing the prospect of a one billion dollar tax.

In this period of difficult reconstruction, the authority and influence vested in this office should hold the balance level and you do quote me correctly in stating that by every natural and proper influence, particularly by the resale of wheat bought at the guaranteed level, I shall try to establish the fair price level expressed in the guarantee, and no higher. I do not understand that any of your committee, nor even the representatives of the farmers' organizations, take issue with me on that position.

WAGON SCALES

BY JOSEPH B. SOWA*

Scale Inspector, Illinois Grain Dealers Association

The increasing cost of conducting business and the narrowing margin between costs and selling prices forces the attention of the up-to-date dealer to any mechanical or accounting methods that will reduce the unit cost for handling business and insure his just profit.

The most complete plant equipment, the most perfect accounting system, the utmost care used to eliminate unexpected losses, the strongest efforts put forth to stop leaks, are of no avail if the basic records of your business are inaccurate.

The basic records of your business are recorded first on the beam of your wagon or truck scale, and the scale should be placed and kept in such condition that you can be certain that it is accurate and will maintain that accuracy.

Hence we offer the following few but important suggestions relative to the installation and care of wagon scales. Other types of scales will be discussed in later issues of the Bulletin.

The first care to be exercised is in the purchase of the scale, which must be of standard make and have sufficient capacity to weigh the heaviest loads without taxing the strength of the levers or bearings.

The foundation or walls must be of sufficient strength and set deep enough in the ground to insure a perfect footing, and should be built of concrete, stone or hard brick. Soft brick should never be used, since they absorb and retain moisture. Have the pit of sufficient depth to permit ready access to all parts of scale, and keep all parts clear.

Install a drain in the pit and place a roof or shed over the scale, in fact do all you can to insure a dry scale pit.

Rust is the most fatal of scale diseases and no respecter of quality. The bearings and pivots will rust and scale off, the result being that the knife edges become blunt, at the same time the relative position of these edges is shifted, thereby changing the multiplication of the lever.

If your scale is of the type that rests on piers in the pit, set the castings directly on the foundation. Do not use plank or timber between the foundation and the scale proper. Even though you renew such timber frequently, you cannot increase its compressive strength.

*From the Bulletin of the Illinois Grain Dealers Association.

Where the team is not weighed with the load it is imperative that the approaches to the scale be level with the platform.

If possible, connect the main levers directly to the steelyard rod which comes through the floor to the weigh beam. Have this rod and all other connections plumb, and all levers level before placing the inside frame on the pivots.

If you must use an extension lever, give its support the same attention as the main foundation.

Have at least one-half inch clearance between the platform and outside frame, build the platform flush with the frame to prevent loads striking or dropping, and provide a manhole in or adjoining the platform to permit frequent cleaning and inspection of the pit and scales.

Have the inside frame sufficiently rigid to support any load without sagging. The bearing feet are attached to this frame and any deflections of the frame will throw the lever connections out of the plumb line.

It is advisable that at regular intervals, at least monthly, you jack up the scale platform, one end at a time, clean the bearings and loops and allow the levers to plumb themselves. Let the platform back carefully, being sure as you lower it that the check rods are free and that the connections do not crowd or pull.

Keep the notches in the weighing beam clean by the use of a stiff brush. A small amount of dirt in these notches may cause a variation of 10 or 20 pounds.

Don't be misled into believing that as long as the beam is oscillating or breaking nicely, that your scale is correct.

Have your scales installed and then inspected regularly by a competent scale man, using at least 1,000 pounds of standard test weights, and keep in mind the fact that although it may not appear as such, nevertheless, hidden under the platform in the scale pit is possibly the most delicate and important machine of your entire equipment.

AN EFFORT TO KEEP THE GULF
PORTS CLEAR

Lack of an adequate amount of ocean tonnage for handling the grain movement through the port of Galveston has brought about an acute situation here. At the end of August there were more than 2,000 loaded cars on the track here, in addition to full elevators. All told, there were more than 10,000,000 bushels of wheat on hand awaiting export. In the elevators and cars at Fort Worth were an additional 5,000,000 bushels.

In order to obtain relief of the congested conditions, the Texas Grain Dealers Association, through Secretary H. B. Dorsey, and other organizations, appealed to Julius H. Barnes, director of the United States Grain Corporation, and to the United States Shipping Board. It is urged that more ships be sent to Galveston to handle the traffic. Ocean tonnage for handling immediately 6,500,000 bushels of wheat, in addition to the ships already provided for, is urgently needed.

It is asserted by Ed. P. Byars, traffic manager of the Fort Worth Freight Bureau, that one reason for the congested condition of the grain movement is the fact that the United States Grain Corporation is inclined to give preference to foreign ships because of the lower ocean rate.

It is expected that the export wheat movement through the port of Galveston for the month of September will be approximately 6,000,000 bushels. This estimate is based on the fact that a total of 29 steamships have been allotted to that port for taking on wheat cargoes.

The August movement of wheat, according to the report prepared by H. A. Wickstrom, chief grain inspector for the port of Galveston, amounted to 2,110,892 bushels. Three part cargoes, or 297,000 bushels, remained on board ship, not cleared, on September 1. The August wheat movement shows an increase over the same month in 1918 of 1,964,438.31 bushels. A part cargo of barley amounting to 140,000 bushels was transported to Liverpool during August aboard the steamship *Yosemite* of the United States shipping board.



CANADA

An elevator of 65,000 bushels' capacity is being erected at Leduc, Alta., for the Quaker Oats Company.

The Western Elevator Company will erect a reinforced concrete building of Ft. William, Ont., to be used for garage and lunch room. The building will cost \$20,000.

The Block Elevator site at Ft. William, Ont., has been purchased by Alexander Shalgrove, a grain dealer. This purchase includes 1,400 feet trackage, a dock on main channel of the harbor and office buildings.

M. K. Smith is one of the incorporators of the Associated Farmers Elevator Company, Ltd., of Winnipeg, Man. The company is capitalized at \$150,000.

INDIANA

The Syracuse Elevator Company operating at Syracuse, Ind., has filed a certificate of dissolution.

Chas. Ruple has disposed of his business at Earl Park, Ind. He has conducted the business there for a year or more.

The Cromwell Elevator Company which has been operating at Cromwell, Ind., has filed a preliminary certificate of dissolution.

Newton Busenbark Grain Company has purchased an elevator at Whitesville, Ind. This firm now operates seven elevators.

A farmers' elevator company is to be organized at Linden, Ind., by farmers in that vicinity. They will build an elevator and operate same.

The property of the Farmers Grain & Milling Company at Union City, Ind., has been purchased by the Union City Elevator Company.

A new concrete elevator and wooden building is to be built at Fowler, Ind., for the Oxford Grain Company. The cement building will cost \$35,000; wooden, \$30,000.

An 11-story plant is to be erected for W. H. Small & Co., at Evansville, Ind., costing \$500,000. W. H. Small is president; Guy M. Purcell, vice-president and general manager of the company.

D. N. Johnson, Robt. W. Willoughby and Otis Kinney have incorporated the Owen Farmers Supply Company of Spencer, Ind. The company will handle feed, flour and coal and is capitalized at \$10,000.

E. Robbins is president; Calvin Thornburg, vice-president and E. Pavy, secretary of the recently incorporated farmers' elevator company at Horace, Ind. The company is capitalized at \$25,000 and will build a grain elevator next year.

The Union Elevator located at Evansville, Ind., has been purchased by A. Waller & Co., of Henderson, Ky. The elevator has a capacity of 250,000 bushels and was the property of Paul Kuhn & Co. J. C. Dodds has been named as Evansville agent of the Kentucky company.

WESTERN

Hans Kaehler has disposed of his grain business at Wiley, Colo.

Four grain tanks of 1,000 bushels' capacity are to be built at White Swan, Wash.

The elevator plant of the Wiggins Farmers Co-operative Elevator Company at Wiggins, Colo., has been overhauled.

The Montana Flour Mills Company has purchased the elevators and milling plant of the Bozeman (Mont.) Milling Company.

J. L. Neil and Geo. L. Neil have incorporated at Spokane, Wash., as the Neil Bros. Grain Company. The grain concern is capitalized at \$50,000.

The Montana Central Elevator Company has purchased the Dixon, Mont., elevator. The Montana company recently acquired elevators at Ravalli and Parma.

The Greeley Elevator at Montague, Mont., has been reopened and has taken over the business of the Montana Elevator Company which closed down its plant at Montague. L. C. Prueninger will have charge.

A 1,000,000-bushel elevator and mill of initial capacity of 400 barrels is to be erected at Pocatello, Idaho, for the Pocatello Milling & Elevator Company. H. C. Erlich and J. S. Lambing are in-

terested. The mill will be electrically driven. There will also be a wheat and flour testing laboratory. The elevator and mill will be erected of reinforced concrete.

A new elevator of 75,000 bushels' capacity is being erected at Mabton, Wash. Jacob Johnson is president; A. E. Mains, vice-president; Arthur King, secretary. The company may also erect a new flour and feed mill.

The Benchland Grain Company was incorporated at Benchland, Mont. The directors are John W. Nelson, H. W. Zimmerman, D. W. Deegan and Bert Barkhoff. The company is capitalized at \$50,000 and will conduct a grain business.

The elevator owned by the Winter-Truesdell-Ames concern at Nashua, Mont., has been reopened for business this fall by O. J. Christianson of Nashua. He is overhauling and making a few repairs on the machinery before beginning operations.

"Trapp" Auto Truck Dumps have been installed in the plants of the following: Farmers Union Elevator Company, Akron, Colo.; Farmers Co-operative Elevator Company, Sedgwick, Colo.; and John E. Spelts Cass & Wilson of Julesburg, Colo.

OHIO AND MICHIGAN

A new elevator is to be built at St. James, Ohio, for the St. James Equity Exchange Company.

A new elevator is to be erected at Crestline, Ohio, for the Crestline Equity Exchange Company.

The Ogemaw County Grange is interested in the erection of a grain elevator at West Branch, Mich.

Earl Blair's elevator and flour mill located at Mt. Gilead, Ohio, has been purchased by the Farmers Co-operative Company.

Farmers around Union City, Mich., are interested in the organization of a company to build and operate a grain elevator.

The elevator of Switzer & White at North Robinson, Ohio, has been sold to the North Robinson Equity Exchange Company.

Mr. Dean of Cadillac, Mich., has purchased the elevator at Oakley, Mich., formerly owned and operated by G. W. Detwiler of Detroit, Mich.

The Waldo Grain Elevator and business at Grand Rapids, Mich., has been purchased by E. L. Wellman. Mr. Wellman is a well-known grain and bean dealer.

The capital stock of the Central Erie Supply & Elevator Company operating at Prout (Sandusky p.o.), Ohio, has been increased from \$15,000 to \$30,000.

Farmers of Bethel and Monroe Townships have made tentative plans for the purchase of a grain elevator at Tippecanoe City, Ohio, or some neighboring town.

Six storage tanks are to be built to the plant of the Bennett Milling Company at Grafton, Ohio, increasing the storage capacity of the establishment to 400,000 bushels.

A grain storage house of 2,000,000 bushels' capacity and a large mill is to be erected at Canton, Ohio, for the Canton Feed & Milling Company. The plant will cost \$200,000.

Construction work has been completed on the elevator of M. B. Lindemann at Scott's Crossing, near Delphos, Ohio. The elevator was moved from Roselm where Mr. Lindemann formerly conducted it.

Articles of incorporation have been filed at Bradner, Ohio, by the Bradner Farmers Elevator Company, capitalized at \$35,000. Clate Lantz, W. E. Clark, W. R. Wirebaugh, Guy H. Keller and Chas. L. Foster are interested.

The Amble Elevator Company has been incorporated at Amble, Montcalm County, Mich., to operate a grain elevator. E. L. Wellman, R. A. Wellman and A. K. Druke are interested. The firm is capitalized at \$10,000.

The Ashley Co-operative Company of Ashley, Ohio, has completed a new vitrified brick tile elevator of 13,000 bushels' capacity. It consists of three tanks, dump scale in cupola with cleaner above driveway. G. P. Gephart is manager.

Extensive improvements have been made to the elevator of the Ashville Grain Company of Ashville, Ohio. The capital stock of the firm was recently increased to \$50,000. The elevator has a capacity of 25,000 bushels of wheat and 20,000 bushels corn. Also has a drying capacity of 400

bushels per hour and is equipped with machinery to load ear corn on the car.

The business of the Northern Elevator Company at Pinconning, Mich., has been purchased by the East Michigan Bean & Grain Company of Omer.

The Coopersville Co-operative Elevator Company has been incorporated at Coopersville, Mich., capitalized at \$20,000. Geo. Wallis, is president; Frank I. Stephens, vice-president; Everett Collar, secretary; Warren Jasper, treasurer; Geo. Portvliet, Ellis Peck and Frank Ambleton, directors.

A new grain storage house and warehouse has been completed by John G. Walker, member of the old firm of Schmidt & Walker, corn millers, of Cincinnati, Ohio. A storage capacity of 25,000 bushels will be provided to be increased later on. Schmidt & Walker was mutually dissolved a short while ago to give Mr. Schmidt time to attend to his other interests.

EASTERN

The Rockville Grain Company has been incorporated to operate at Vernon, Conn. The company is capitalized at \$60,000.

A building at Monmouth, Maine, has been purchased by J. B. Hain & Co., which will remodel it into a grain and feed store. Geo. Merrill is to be manager of the business.

A new 5,000,000-bushel elevator of the Pennsylvania Railroad at Canton is to be ready for operation by December 1. This elevator replaces Elevator No. 3 which burned.

A new company has been organized at Somerville, Mass., to handle grain, flour and cereals under the firm name of Colbert Bros. Company. The firm is capitalized at \$25,000.

Jas. and Daniel M. Reid and Leon R. Loutree have incorporated at Gapland, Maine, as the Reid Company, capitalized at \$6,000. The firm will handle grain, dairy products, flour, etc.

Articles of incorporation have been filed at Buffalo, N. Y., by M. F., A. M. and O. C. Cohn of Buffalo under the name of the Sunset Feed & Grain Company. Its capital stock is \$10,000.

An eight-story elevator 22x25 feet is being erected in addition to the plant of the Quaker City Flour Mills at Philadelphia, Pa. The addition will cost \$15,000.

A grain elevator of 35,000 bushels' capacity is to be erected at Hanover, Pa., for the Oxford Feed Mill Company. The elevator will be 33 feet high and will be built on a cement foundation.

Reports state that the Manchester Grange Co-operative Association of Emigsville, Pa., will build an elevator there and conduct it. S. T. Pelling is president and J. C. Shaffer secretary of the Association.

H. Harrison, F. D. Hebbard and W. J. Blodgett have filed incorporation papers at Albion, N. Y., as the Harrison-Building Company, Inc. The firm will handle grain and farm products and is capitalized at \$50,000.

The C. H. Moore Company has purchased the grain business of Geo. L. Dennis at Stafford Springs, Conn. This firm will continue operating the business under the old firm name of Dennis Grain Company.

SOUTHERN AND SOUTHWESTERN

J. H. Bell is erecting an elevator at Cushing, Okla.

J. C. Street will engage in the grain business at Goldthwaite, Texas.

Crews & Burke are succeeded in the grain business at Floydada, Texas, by W. J. Burke.

H. B. Campbell has sold his elevator at Welch, Okla., to the Mead Grain Company of Ft. Scott, Kan.

The Producers Elevator Company has been incorporated to operate at Withrow, Okla., capitalized at \$20,000.

W. F. Hull & Co., have incorporated at Dallas, Texas, to conduct a grain and cotton business. W. F. and M. C. Hull and C. M. Reid are interested.

I. R. Flint, B. E. Blanchard and C. T. Daniel have incorporated at Rosston, Okla., as the Rosston Elevator Company. The firm is capitalized at \$5,000.

R. F. Willingham, E. C. Webb, B. B. Ford, W. E. Markwalter and N. F. Powell have incorporated the Shippers Bonded Compress at Atlantic, Ga., cap-

italized at \$520,000, with privilege to increase to \$1,000,000. The company will maintain a bonded warehouse for storing grain, manufactured products, lumber, cotton, etc.

The elevator of the Carrier Mill & Elevator Company at Carrier, Okla., is being remodeled. The capacity is being increased and the outside of the elevator iron clad.

The Florida Elevator & Grain Company is contemplating the erection of a modern grain elevator at Moore Haven, Fla., for handling corn, peanuts, beans and other small grains.

To handle grain, flour, meal, etc., the Chas. M. Glenn Company has been incorporated at Richmond, Va., capitalized at \$10,000. Chas. M. Glenn is president and P. H. Eubank, secretary of the firm.

Jas. F. Shehane, A. W. Wier and F. L. Parr have filed incorporation papers at Athens, Ga., to conduct a grain and feed business there. They are incorporated at \$25,000 with privileges to increase stock to \$200,000.

The Delier & Speir Milling Company of Augusta, Ga., has made plans for the construction of a warehouse at Augusta to be used in distributing its grain and wheat products. The firm conducts a wholesale business in grain and flour.

A large elevator of 30,000 bushels' capacity is to be constructed at Dublin, Ga., for the Farmers Co-operative Association. The elevator will be equipped with loading machinery of 15 cars capacity per day and unloading machinery of 500 bushels' capacity per hour.

Chas. B. Carothers, C. W. Hall, J. C. Griffith, R. N. Archer, G. T. Carothers and E. T. Carothers, who operate at Memphis, Tenn., as the Chas. B. Carothers Company, have increased their capital stock from \$20,000 to \$40,000. The company conducts a grain business there.

Plans are on foot for the construction of a grain elevator at Houston to cost approximately \$1,000,000. The Houston Chamber of Commerce, the Houston Cotton Exchange and the Houston Hay and Grain Exchange have indorsed the proposition and a committee representing the three bodies has been appointed for the purpose of assisting in financing the project. This committee consists of E. L. Neville, D. S. Cage and C. P. Shearn. The proposed elevator will be located on the Ship Channel where it will have the benefit of ocean shipping terminals.

ILLINOIS

The elevator at Mahomet, Ill., has been purchased by Harry H. Woolsey.

W. H. Tallyn is succeeded in the grain business at Wenona, Ill., by L. A. Reckoner.

A 10-ton truck Fairbanks Scale is being installed in the elevator of Noah Twist at Divernon, Ill.

An elevator is being erected at Carle Spring (Heyworth p. o.), Ill., for G. W. Arnolds & Son.

A new elevator is to be built at Pesotum, Ill., for Garner, Davis & Burton, replacing the one burned.

A new elevator is to be built at Tampico, Ill., for the Farmers Elevator Company. It will cost \$25,000.

The grain, hay and flour and feed business of C. Shumaker's Sons at Altamont, Ill., has been sold to Martin Burrow.

The capacity of the elevator of the Farmers Elevator Company at Kankakee, Ill., is to be enlarged to 100,000 bushels.

The Farmers Elevator Association of Ashkum, Ill., has let the contract for the construction of a modern grain elevator there.

A grain elevator of 25,000 bushels' capacity is being constructed at Ullrich (Lovington p. o.), Ill., for the Farmers Grain & Produce Company.

The Hanna City Farmers Elevator Company has its new elevator at Hanna City, Ill., practically completed, and machinery is being installed.

The Minor Elevator at Muncie, Ill., has been purchased by a banking firm organized at Fithian. The banking firm will organize a new farmers elevator company to operate same.

A new 14,000-bushel elevator is being constructed at Godfrey, Ill., for the Godfrey Farmers Elevator Company. The elevator is of concrete construction, cylindrical in shape.

The grain and lumber business at Middlegrove, Ill., has been purchased from W. Courtney by W. I. and Elmer Jackson and H. H. Payne. Possession was given on September 1.

The new granary near Elliott, Ill., is practically completed. The plant is of vitrified tile and is 33 feet in diameter and 50 feet high. The plant will be equipped with elevator and scales and has bins for corn and oats.

A new co-operative elevator company has been formed at Alexander, Ill., with the following as directors: John E. Erickson, Joseph Bergschneider, Henry Rider, John Luby, Geo. Ruble, A. W. Robertson, W. A. Brown and F. F. Foster. It is re-

ported that a large elevator will be built by the firm in the near future. The capital stock amounts to \$25,000.

Articles of incorporation were filed at London Mills, Ill., by the following under the name of the London Mills Farmers Co-operative Company: A. C. Timmons, E. H. Harden and Frank Reihm. Capital stock is \$30,000.

Geo. Holke, Julius Grimond Frey, Betcher Lenen and John D. Mahlstedt have filed incorporation papers at Green River, Ill., as the Green River Farmers Co-operative Grain Company. The company is incorporated at \$5,000.

A modern grain elevator of 30,000 bushels' capacity is to be erected at Rapatee, Ill., for the farmers elevator company recently organized there capitalized with stock of \$30,000. The elevator will be ready for operation by January 1.

Boughton & Harlan have purchased the grain business at Chenoa, Ill., from L. L. Bennion. Mr. Bennion, who will now engage in the real estate business at Los Angeles, Calif., purchased the F. L. Warner elevators at Chenoa, Ballard and Ocoya seven years ago and has lived at Chenoa since that time.

MISSOURI, KANSAS AND NEBRASKA

The elevator of C. H. Veatch at Ellsworth, Kan., has been remodeled.

Newman & Morton Elevator at Laurel, Neb., has been purchased by J. R. Durrie.

A. W. Armstrong has sold his elevator at Phillipsburg, Kan., to the Farmers Union.

The elevator of the Trans-Mississippi Grain Company at Overton, Neb., has been repaired.

The Anderson Bros. have opened their grain elevator at St. Francis, Kan., for business.

A warehouse is to be erected at Clinton, Mo., for the Farmers Elevator & Supply Company.

A 16,000-bushel elevator is being erected at Archie, Mo., for the Farmers Elevator Company.

The Farmers Co-operative Company of Harper, Kan., will construct a new grain elevator and warehouse.

The Farmers Elevator at Jetmore, Kan., has been leased by the Ling-Vetter Grain & Supply Company.

A. W. Armstrong's elevator and feed yard at Glade, Kan., has been purchased by the Farmers Union.

J. T. Fletcher's elevator at Breslau, Neb., is now owned by the Western Terminal Grain Elevator Company.

A new elevator of 16,000 bushels' capacity is being erected at Allen, Kan., for the Farmers Union Association.

A new office has been built by the Farmers Co-operative Elevator & Mercantile Company of Burlington, Kan.

To handle grain and feed, the Farmers Elevator Company was organized at Otterville, Mo., capitalized at \$15,000.

A new 10,000-bushel elevator, iron clad, has been completed at Aliceville, Kan., for the Aliceville Elevator Company.

The new farmers' elevator at Saxman, Kan., has been completed. The elevator has a capacity of 200,000 bushels.

The Humanville Mill & Elevator Company of Humanville, Mo., is building a modern 10,000-bushel elevator.

The elevator and grain business of D. E. Whitaker, and Chas. Triplett at Troy, Kan., has been purchased by E. S. Leland.

The grain and seed firm of Reding & Clark at Joplin, Mo., has been purchased by the Hanna-Pate Grain Company of that city.

The Waynesville Mill & Elevator Company of Waynesville, Mo., has let the contract for a 15,000-bushel elevator and new mill.

The Farmers Grain & Supply Company has purchased the Dakota City, Neb., elevator of the William Slaughter Grain Company.

The Farmers Elevator Company has purchased the elevator of Barr & Waller at Foster, Mo. The company is capitalized with stock of \$15,000.

The Lodge Pole Lumber & Grain Company's elevator at Lodge Pole, Neb., has been purchased by the Geo. A. Roberts Company located at Omaha, Neb.

The Farmers Elevator Company of O'Neill, Neb., has laid the foundation for a coal storage house. The storage house will have concrete floor and foundation.

The contract has been let by the Farmers Co-operative Association of Eddyville, Neb., for the construction of a new elevator and warehouse costing \$3,000.

The Associated Mill & Elevator Company has purchased the property of the Silver Grain Company at Morganville, Kan., and the Federated Mills

Company. The elevators have capacities of 25,000 and 16,000 bushels and mill has capacity of 150 barrels flour and 100 barrels cornmeal daily.

The Four County Grain Company has been incorporated at Logan, Kan. The company is capitalized at \$10,000.

The Gooch Milling & Elevator Company of Lincoln, Neb., is building 10 tempering bins of concrete construction and of 18,000 bushels' capacity.

A new elevator is under course of construction at Westpoint, Neb., for the Farmers Co-operative Company. The elevator will have a capacity of 45,000 bushels.

Niblick Building at Trenton, Mo., has been purchased by the Marlin grain company. The Marlin Grain & Flour Company will conduct a grain and flour and feed business.

The capital stock of the Farmers Union operating at Manhattan, Kan., has been increased by \$25,000. The company also contemplates the erection of a grain elevator.

The Farmers Grain & Lumber Company has been incorporated at Montezuma, Kan., capitalized at \$30,000. The organizers of the firm are: M. L. Fry, H. B. Thompson and J. W. McReynolds.

The Farmers Elevator, Mercantile & Manufacturing Company has been incorporated at Drexel, Mo., capitalized at \$25,000. The company will conduct a grain business and handle other farm and mercantile products.

The Mid-West Grain Company purchased the grain elevator at Elwood, Mo., from the Keystone Elevator & Grain Company. The elevator has a capacity of 500,000 bushels. John M. Flynn is president of the Mid-West firm.

E. B. McEvoy is president; Albert Kleeb, vice-president; Chas. Wolford, secretary and treasurer; John Staab, H. M. Coble and H. S. Waterberry directors of the Farmers Grain & Supply Association of Broken Bow, Neb. The capital stock of the firm is \$25,000.

The elevators of Josiah Crosby & Son, St. Francis, Kan.; P. A. Johnston, Coldwater, Kan.; Farmers Union Exchange, Tilden, Neb.; Lexington Mill & Elevator Company, Lexington, Neb.; Halstead Mill & Elevator Company, Halstead, Kan.; Frank Dorn Elevator Company, Big Springs, Neb.; Bennett Grain Company, Potter, Neb.; Farmers Co-operative Association, Braymer, Mo.; Mercantile Association, Ludlow, Mo., have been equipped with "Trapp" Auto Truck Dumps manufactured by the Trapp-Gohr-Donovan Company of Omaha.

IOWA

J. W. Lounsberry has bought the K. R. Frazier & Co. Elevator at Colo, Iowa.

John H. Taylor has bought the elevator of Smith & Dilliver at Burlington, Iowa.

Synhorst & Son have purchased the elevator of J. E. Vanderzyl at Leighton, Iowa.

The elevator of Gitchell Bros. at Arlington, Iowa, has been equipped with new machinery.

E. P. Meyer has purchased the elevator of Parkersburg, Iowa, from Anderson & Lynch.

The Farnhamville, Iowa, elevator of H. F. Dohrman has been sold to the D. Milligan Company.

A grain elevator is to be constructed at Emerson, Iowa, for the Farmers Co-operative Union.

B. Swenson has sold the Roland, Iowa, grain business which he has been conducting to C. A. Pfund.

A 20,000-bushel elevator is to be erected at Hartwick, Iowa, for the King-Wilder Company of Cedar Rapids.

The Lytton Grain Company of Lytton, Iowa, has purchased the elevator at that place of R. H. French & Co.

A. H. Rieppe & Son's elevator interests at Sperry, Iowa, has been purchased by A. D. Hayes Company of New London, Iowa.

The grain elevator business of St. Clair & Son at Mt. Auburn, Iowa, has been sold to the King Wilder Grain Company.

M. T. Blessing's interest in the Rolfe Grain & Milling Company at Rolfe, Iowa, has been purchased by H. D. Brickman.

Improvements are to be made to the elevator of the Farmers Co-operative Products Company at Doon, Iowa, costing \$3,000.

L. J. Midgell is now owner of the Lake City, Iowa, elevator. The plant was formerly the property of the Updike Grain Company.

Plans are under course of consideration by the McKee Bros., grain and commission men of Muscatine, Iowa, for the construction of a grain elevator there.

Extensive alterations are being made to the elevator of R. B. Galbraith & Co., at Newell, Iowa. The elevator can now handle 2,000 bushels of grain per hour.

A modern grain elevator is being erected at Edna, Iowa, by the Edmonds-Londergan Company. The Burrell Engineering & Construction Company had the contract for the plant. The structure will

be of reinforced concrete and have a capacity of 35,000 bushels. The plant, it is said, will be completed by September 15.

John Tjaden, grain dealer of Wellsburg, Iowa, has taken into partnership with him his son-in-law, Sherry Dilly. They will in the future conduct the grain business at Wellsburg as Tjaden & Dilly.

The site of the elevator, destroyed by fire, owned by the Farmers Elevator Company at Ontario, Iowa, has been purchased by L. E. Munsinger and others. They will build a new elevator there.

O. J. Meredith, W. L. Sargent, T. S. Heggen and A. E. Sargent have incorporated at Des Moines, Iowa, as Sargent & Co., to deal in grain, hay, coal, cereal products, etc. The capital stock of the firm is \$100,000.

The Trapp-Gohr-Donovan Company of Omaha, Neb., announces the recent installations of its "Trapp" Auto Truck Dumps in the following plants: Farmers Grain & Lumber Company, Carroll, Iowa; Farmers Grain Company, Chatsworth, Iowa; T. S. Cathcart & Sons, Correctionville, Iowa; D. E. Shorrett, Ida Grove, Iowa; Ida County Grain Company, Galva, Iowa; Metcalf & Cannon, Paullina, Iowa; Farmers Elevator Company, Early, Iowa; Jewell Farmers Elevator Company, Jewell, Iowa; Pocahontas Grain Company, Pocahontas, Iowa; Wilson Grain Company, Truesdale, Iowa; Farmers Elevator & Lumber Company, Aurelia, Iowa; Farmers Co-operative Association, Ireton, Iowa; Henry B. McVeigh of New Sharon, Iowa, has equipped his plant with a double "Trapp" Combination Truck and Wagon Dump.

MINNESOTA AND WISCONSIN

A new elevator is to be constructed at Flaming, Minn., for the Equity Elevator concern.

The Dobie Elevator at Mapleton, Minn., has been equipped with a seed scalper.

A modern elevator is to be constructed at Akely, Minn., by the McConville Bros.

The Equity Elevator Company of Alberta, Minn., is building an addition to its office.

The elevator of the Farmers Elevator Company at Watson, Minn., is being remodeled.

The Farmers Equity recently purchased the elevator of Paul W. Giese at Verdi, Minn.

New machinery is being installed in the elevator of P. F. Heckleman at Albertville, Minn.

Earl Eames has entered into partnership with his father in the elevator at Morris, Minn.

An elevator is being erected on the right-of-way at St. Cloud, Minn., for the Erwin Milling Company.

A. H. McCabe has sold his business at Weston, Wis., to the Elmwood Lumber & Grain Company.

The Lund Grain Company has sold its elevator at Briceyn, Minn., to the Farmers Elevator Company.

The John Whiting Elevator and residence at Henning, Minn., has been taken over by E. P. Toscabold.

The Atlas Elevator Company of Minneapolis, Minn., is contemplating selling its elevator at Hills, Minn.

The grain, feed mill and warehouse of John H. Johnson at Montfort, Wis., has been sold to John C. Kramer, Jr.

Two elevators at Lewiston, Minn., owned by J. J. Litcher have been leased by Kimmel & Meyers of Rollingstone.

A grain elevator is to be erected at Strathcona, Minn., and conducted by the farmers there on a co-operative basis.

A grain, hay and flour and feed business is to be conducted at Antigo, Wis., by the Langdale Wholesale Company.

The elevator of T. E. Ebberson Company at Canby, Minn., has been equipped with a "Trapp" Auto Truck Dump.

Probably a co-operative elevator will be established at Elbow Lake, Minn. J. W. Wood and L. M. Bond are interested.

The Chippewa Milling Company has purchased an elevator at Winona, Minn. M. Lundquist will operate the elevator.

Geo. Huhn has re-entered the grain and produce business at Clintonville, Wis. He retired from business a few months ago.

The elevator of the Farmers Elevator Company located at Gonvick, Minn., has been equipped with a Fairbanks-Morse Manlift.

Garding & Warnert have purchased the Kraker & Wertin Elevator located at Albany, Minn. These two will operate the elevator.

The elevator of the Farmers Grain & Fuel Company at Delhi, Minn., is being equipped with a new 10-horsepower gasoline engine.

C. Steinkopf has sold his elevator which he operated at Detroit, Minn., as the Detroit Grain & Fuel Company to C. L. Hoppeter of Wooster, Ohio. J. J. Wade, Mr. Hoppeter's son-in-law, will

be interested in a small way with his father-in-law in the grain business which will be conducted under its old name.

The new elevator of the Farmers Equity at Bon-gards, Minn., has been completed. In addition to the elevator are feed and coal sheds.

The Pfeiffer Grain & Seed Company is succeeded at Durand, Wis., by the Pfeiffer Elevator Company. The firm had been in business for 35 years.

After having been closed down for a number of years, the St. Anthony & Dakota Elevator at Mentor, Minn., has been opened for business.

The farmers elevator company operating at Greenbush and Badger, Minn., has disposed of the two plants to the Equity Co-operative Exchange.

Business operations have been opened in the old Mikkelson Elevator at Stephen, Minn., by the Stephen Farmers Co-operative Elevator Company.

L. B. Bells and Jos. Vexiena have organized the Farmers Grain Company at Argyle, Minn., and have purchased and opened for business a grain elevator there.

The Monarch Elevator at Litchfield, Minn., has been purchased by the Equity Society. Richard Welch has been in charge of the Monarch Elevator.

A warehouse and elevator is to be erected at Ladysmith, Wis., for the Morgan Produce Company. The elevator and warehouse will cost \$7,500.

The McLaughlin Elevator at Medford, Minn., has been purchased and taken possession of by R. E. Jones & Co., of Wabasha. This company now owns 53 elevators in all.

Operations have been started in the elevator at Canby, Minn., purchased a while ago by F. J. Speight. The plant was formerly known as the Fischer Elevator.

The Neenah & Menasha Supply Company has been incorporated at Neenah, Wis., capitalized at \$10,000. The company will conduct a grain, feed and flour business.

The Farmers Equity Exchange of Waterville, Minn., has leased a right-of-way at that point from the Chicago Great Western upon which it will build a grain elevator.

The Equity Co-operative Exchange has opened the elevator at Wendell, Minn., which it purchased from the Farmers Elevator Company, for business with I. O. Kaasa as buyer.

The Chippewa Milling Company of Montevideo, Minn., has purchased the O. E. Ax Elevator at Wheaton, Minn. M. V. Lundquist will be in charge of the elevator.

An additional tank is to be built to the elevator of the Brooks Elevator Company at Minneapolis, Minn., increasing its capacity considerably. The addition will cost \$11,000.

J. H. Lee has taken over the entire interests of the firm of Person & Lee in the elevator at Montevideo, Minn. The firm of Person & Lee was dissolved by mutual consent.

Oscar Nelson is president; Edward W. Swedberg, vice-president; S. Dalson, secretary and treasurer of the recently incorporated Northern Hay & Grain Company of Rhinelander, Wis.

R. P. Woodworth and others have incorporated at Minneapolis, Minn., the Anamoose Grain Company, capitalized at \$50,000. The company will conduct a grain elevator and warehouse and will handle grain, cereals, etc.

C. W. Johnson is the new proprietor of the elevator at Detroit, Minn., of the Andrews Grain Company. Mr. Johnson is an experienced grain man and for four years has been operating the Ogema Grain Company at Ogema, Minn.

The I. L. Demaray Company has sold out its grain elevator, fuel and drayage business located at Pipestone, Minn., to Chas. S. Tobias and his brother, Lewis. The property will not change hands until March 1 of next year.

C. T. Buchanan and others have incorporated the Prior Lake Elevator Company of Prior Lake, Minn., and have purchased the elevator there from the Costello Hardware Company. A warehouse for storing feed and flour is to be built at once.

Farmers have incorporated the Outagamie Equity Exchange at Appleton, Wis., to build and operate a co-operative elevator and warehouse. Henry Thiel, Theodore Glaser and Frank Reimer are interested. The company is capitalized at \$50,000.

The Wabasha Milling Company of Wabasha, Minn., has let the contract to the Hickock Construction Company for a new elevator of 100,000 bushels' capacity. This plant will consist of six large storage tanks each 82 feet high and 20 feet in diameter.

A \$30,000 brick elevator has been completed at Montevideo, Minn., for the Farmers & Merchants Elevator Company. The plant is equipped with the latest types of machinery. H. E. Swanson is manager; Herman Ost, president; F. E. Wright, vice-

president; A. M. Parks, secretary and treasurer; Gustav Eliason, C. B. Borene, O. N. Norman, Peter E. Nelson and T. G. McKay, directors.

A new 24x40 foot elevator, three stories in height, equipped with modern machinery, is to be built at Elysian, Minn., for Geo. T. Murray.

Improvements have been made to the elevator of the Buchanan Grain Company of Shakopee, Minn. A Fairbanks-Morse Dump Scale has been installed and a new and modern elevator system installed which will increase the elevating capacity to 800 bushels per hour.

I. C. Lyman announced recently the purchase of a grain elevator of 300,000 bushels' capacity at Milwaukee, Wis. Mr. Lyman was formerly with the Lyman Joseph Grain Company which has discontinued business. Mr. Lyman is now with the Franke Grain Company.

William Doran, Samuel H. Lake, John B. Benson, J. C. Johnson, Chas. C. Greenwood, A. O. Richardson and F. J. Johnson have incorporated the Farmers Grain & Shipping Association at Menahga, Minn. The company will conduct a grain business, seed, corn and other cereals.

THE DAKOTAS

A farmers' elevator company has been organized at Hague, N. D.

The Empire Elevator Company is rebuilding its elevator at Mott, N. D.

The capacity of the Woodworth Elevator at Kensal, N. D., has been doubled.

C. H. DeWald has purchased the grain business of R. E. Dana at Armour, S. D.

Improvements have been completed to the V. A. Anderson Elevator at Clark, S. D.

Fred Horseman has purchased the elevator of Frank Pettyjohn at Harrold, S. D.

The Davis Grain Company has been incorporated at Davis, S. D., capitalized at \$25,000.

The elevator of Walt & Dana at Stickney, S. D., has been sold by them to R. E. Dana.

A grain cleaner has been installed in the elevator of Bailey & Sether at Barney, N. D.

A new grain elevator has been completed at Redelm, S. D., for the Bagley Elevator Company.

Adam Wollach's grain business at Lesterville, S. D., has been taken over by Christopher Diede.

The grain elevator of J. J. Doyle and James Welsh at Wishek, N. D., has been sold by them.

The elevator of the Dyball & Cotton Company at Volga, S. D., has been purchased by J. O. Sundet.

Farmers around St. Joe let the contract for a co-operative elevator to be built at Starkweather, N. D.

A modern elevator is being erected at Bonilla, S. D., for the Farmers Equity Union Elevator Company.

Remodeling has been done to the Cargill Elevator at Eckelson, N. D., preparatory to this fall's business.

H. E. Schweiderhorn has purchased the elevator interests of the Monarch Elevator Company at Lennox, S. D.

A new grain elevator of 25,000 bushels' capacity is to be constructed at Dupree, S. D., for the Bagley interests.

A new driveway is being built and other improvements made to the Cargill Elevator at Willow Lake, S. D.

The International Elevator Company of Duluth, Minn., has purchased the P. C. Crangle Elevator at Hunter, N. D.

The elevator of the Cargill concern at Gwinner, N. D., which burned down is to be replaced by a new establishment.

The D. E. Stoddard Elevator at Willow Lake, S. D., has been purchased by the Traders' Grain Company at Minneapolis.

Operations have been started at Selfridge, N. D., by the Farmers Equity Elevator with C. T. Wynkoop as grain buyer.

E. R. Dallas has purchased the elevator of Ahlbrecht & Sons at Denhoff, N. D., conducted by Wm. F. Ahlbrecht since 1907.

The elevator of the Farmers Grain Company at Grandin, N. D., is being rebuilt. The plant will have a capacity of 100,000 bushels.

The old Equity Elevator Company at Lemert (Carrington p. o.), N. D., is being reorganized and an entirely new company formed.

A. N. Sorbo, A. C. Lindsey and N. O. Bureson have incorporated the Crosby Farmers Grain Company at Crosby, N. D., capitalized at \$10,000.

A new engine room has been built at the elevator of the Farmers Co-operative Elevator Company at Michigan, N. D., of which J. L. Barney is manager.

The Bagley Elevator at Bowman, N. D., has been leased by Geo. W. Elgar. He will have personal charge of the business. Mr. Elgar has for a

number of years been manager of the Bowman Equity Exchange and only recently resigned his position as such.

Thos. Wildish has disposed of his elevator which he operated at Ellsberry, N. D., as the Ellsberry Grain Company to the Equity Elevator Company, who will operate it in the future.

The Imperial Elevator at Walhalla, N. D., has been taken over by the Society of Equity. The plant for many years has been owned and operated by J. W. Harvey.

The Farmers Elevator at Jefferson, S. D., has been purchased by the Western Terminal Company of Elk Point. Mike King is president of the terminal concern.

Several improvements have been made to the elevator of the Farmers Equity at Bowdon, N. D., including the installation of a 20-horsepower Fairbanks Morse Engine.

The Chaffee elevator and mill has been purchased by the recently organized Farmers Co-operative Mill & Elevator Company of Casselton, N. D. W. D. Movius is manager.

The engine used formerly to operate the old elevator of the Ludden Co-operative Company at Ludden, N. D., has been moved to the new plant which the firm purchased recently.

The Christopher Elevator at Parker, S. D., has been taken over by the Shanard Elevator Company, J. H. Halsay will have the management of the elevator under his supervision.

The Equity Elevator Company has purchased the Inkster, N. D., elevator belonging to the Great Western Grain Company. W. P. Storms will be agent for the company there.

A new 10-horsepower Fairbanks Morse gas and kerosene engine and new cleaner has been installed in the elevator of the Flushing Farmers Elevator Company at Flushing (Inkster p. o.), N. D.

The Atlantic Elevator at Bisbee, N. D., has been purchased by Leo Kruchten, Peter Skow and Chas. F. Stinchfield. They will conduct the business under the name of the Bisbee Farmers Grain Company.

Improvements are being made to the elevator of the farmers' company at Milnor, N. D. A large coal shed with concrete foundation and bins has been built. The office headquarters are to be enlarged.

Equity Co-operative Exchange has purchased and has ready for operation a 30,000-bushel elevator at Buchanan, N. D., known as the North Star Elevator. G. H. Knoble is president of the Equity Exchange.

The Farmers Equity Elevator Company of Hoving (Minor p. o.), N. D., has increased its capital stock from \$10,000 to \$20,000. Henry Bussman was elected president of the firm; E. J. Hatle, vice-president and W. F. Aderman, secretary of the elevator company.

Jacob Dockter, P. P. Schnabel and Peter Knoll have incorporated at Venturia, N. D., as the Farmers Grain & Produce Company capitalized at \$10,000. The company will conduct a business in grain, coal, live stock and farm products.

Geo. M. Engler's elevator at Ipswich, S. D., has been purchased by a stock company organized there recently capitalized at \$20,000. The firm will install a flour mill of 50 barrels' capacity. L. E. Paulus, W. H. Smith and Mr. Champlin are interested.

The elevator at Hastings, Barnes County, N. D., has been purchased by a number of men, one of whom is B. C. Hanson of Tuttle. Mr. Hanson has been manager of a Tuttle elevator for two years. Previous to that he operated, as manager, the Victoria Elevator at Hazelton.

The old Farmers Elevator Association of Wyndmere, N. D., has been dissolved. A new firm is to be organized to be known as the Farmers Elevator Company. Alfred Thompson will be president; A. D. Hanson, vice-president and Alvin Manstrum, secretary-treasurer of the company.

The elevator of the New Salem Union Elevator Company at New Salem, N. D., is undergoing remodeling. New modern grain cleaning machinery, electrically driven, is being installed together with up-to-date labor saving devices and dust collecting system. An annex of 5,000 bushels' capacity has been added to the building making total capacity 40,000 bushels.

The following South Dakota elevator firms have equipped their establishments with "Trapp" Auto Truck Dumps, manufactured by the Trapp-Gohn-Donovan Company of Omaha, Neb.; Farmers Elevator Company, Raymond; Farmers Union Livestock & Grain Buying Association, Irene; Farmers Educational Co-operative Union, Winner; L. J. Schroeder & Co., Plankinton; Elrod & Henry, Clark; Farmers Co-operative Company, Burbank; Nye-Schneider-Fowler Company, Winner and Burke; McCaull-Webster Elevator Company, Burbank; Farmers Co-operative Grain & Livestock Company, Burke; Hartford Grain Company, Hartford; Farmers Elevator, Marion; Judge & Hinrichs, Parker.

FIRES-CASUALTIES

Jarbalo, Kan.—Fire destroyed the grain elevator of the Casebier Sons.

Palmer, Kan.—The South Elevator was destroyed by fire recently.

Ft. Smith, Ark.—The warehouse of the Western Grain Company was burned not long ago.

Olmstead, N. D.—The Farmers Elevator here was struck by lightning and damaged slightly.

Bethany, Ill.—T. W. Abrams' elevator burst recently scattering about 1,000 bushels of grain.

Miami, Okla.—Lightning struck and destroyed a warehouse here containing \$8,000 worth of hay.

Newport, Ind.—With a loss of \$25,000, the elevator of W. M. Prillman was destroyed by fire recently.

Fairfax, Iowa.—Fire destroyed the Farmers Grain & Coal Elevator. Fourteen cars of coal were destroyed.

Freeland, Mich.—The elevator of the Peoples Grain Company was destroyed by fire with a loss of \$65,000.

Portland, Texas.—With a loss of \$15,000, the building of the Arnold Seed & Produce Company was burned.

Union, Ohio.—Together with 5,000 bushels of wheat the elevator of Grant Campbell was destroyed by fire.

West Concord, Minn.—Together with a considerable quantity of wheat the elevator here was burned recently.

Galt, Iowa.—Fire destroyed the elevator here. It is thought that small boys playing with matches started the blaze.

Little Rock, Ark.—The warehouse of the Western Grain Company was destroyed by fire together with 120 tons of bales hay.

Billings, Mont.—Fire, starting from an engine spark, destroyed completely the Occident Elevator with a loss of \$25,000.

Florissant, Mo.—The feed and seed house of J. B. Mueller was damaged by fire. Loss amounted to \$15,000; covered by insurance.

Powhattan, Kan.—Lightning struck and did slight damage to the elevator of the Powhattan Elevator Company on August 17.

Afton, Okla.—Fire destroyed the hay in the barn of the Lipscomb Grain Company to the amount of \$4,000. The hay was insured for half its value.

Palmer, Kan.—On August 19, the elevator of the Baker-Crowell Grain Company burned. The elevator had 4,500 bushels of grain stored in it.

Philadelphia, Pa.—Fire broke out in the Keystone Elevator & Warehouse Company's plant here and destroyed more than 200,000 bushels of grain, mostly oats.

Kansas City, Mo.—On September 13, fire and explosion wrecked the Murray Grain Elevator here entailing loss of \$3,500,000 and causing the death of 13 people and injuries to 12 others, some prob-

ably fatal. All but one of these were employees. There were 1,000,000 bushels of grain in the elevator at the time.

Atlantic, Iowa.—Damages amounting to \$2,000 were done to the elevator of Nelson & McCaustland by fire on August 13. The fire was caused by lightning.

Sanish, N. D.—On August 26 fire destroyed the Farmers Elevator here. The elevator when built was valued at \$12,000. The loss is practically covered by insurance.

White Bear Lake, Minn.—The elevator of Chas. Wiegand together with grain valued at \$3,000 was destroyed by fire of unknown origin. The building itself was valued at \$40,000.

Clearfield, Iowa.—Fire destroyed the Ellston Elevator. Backfiring in an engine was the cause. The plant was a total loss; small insurance was carried.

Oswego, Ill.—The floor beneath a huge grain bin in the Todd Elevator here gave way. Roy Burrell was in the bin at the time and was smothered to death beneath 1,000 bushels of grain.

Jacksonville, Ill.—The elevator of J. F. Blackburn burst under the excessive strain put upon it by 100,000 bushels of grain and scattered large quantities of its contents upon the ground.

Poneto, Ind.—A grain bin at the elevator here burst pouring about 2,000 bushels of grain on the ground. The bin was overloaded with grain; this was necessitated by the scarcity of cars in which to ship the grain.

Heyworth, Ill.—Spontaneous combustion caused the fire which destroyed the elevator of Harrison & Co., entailing a loss of about \$25,000. The elevator was filled with grain at the time. Loss is partially covered by insurance.

Ranger, Texas.—Richardson & Evans lost their wholesale grain and hay house by fire during which two box cars of hay and a number of small shacks were also destroyed. The total loss incurred by the fire is estimated at \$50,000.

Kirkpatrick, Ind.—On August 16 the grain elevator owned by the Kirkpatrick Grain Company was totally destroyed by fire which started in the cob house at the rear of the building. The elevator was filled with wheat, rye and oats.

Mantador, N. D.—The Farmers Grain & Feed Company suffered the total loss of its elevator by fire on August 23. The fire was of unknown origin. The building was modern in every particular and cost \$32,500; insurance of \$25,000 was carried on the building. The elevator was built two years ago.

Pittsburgh, Pa.—On September 8, the Central Grain Elevator was totally destroyed by fire. About 300,000 bushels of grain, mostly oats, malt and corn were burned. This was valued at about \$500,000 and was owned by 20 firms; loss covered by insurance. Further details pertaining to the fire are to be found elsewhere in this issue.

OBITUARY

BARTLETT.—Norman W. Bartlett, son of the late William H. Bartlett, well-known grain man, died enroute from Vermejo, N. Mex., to Chicago, Ill. Mr. Bartlett had been suffering from lung trouble for a number of years. He was a member of the Chicago Board of Trade though not actively interested in the grain trade.

BEAUMONT.—Following an operation, Sam Beaumont died at a Chicago hospital. Mr. Beaumont was a well-known cash grain handler and only a short while ago sold his membership on the Board of Trade.

DICKSON.—C. E. Dickson, a young grain merchant of Sackville, N. B., was drowned recently while bathing in front of a hotel at St. Anne de Bellevue. Mr. Dickson and his bride of one week were spending the week end at St. Anne. He left the hotel for a swim before breakfast, got beyond his depth and became exhausted before he could reach shore.

EDMONDS.—After suffering since last march from the effects of a paralytic stroke, Ebon Edmonds died at Simcoe, Ont. He had been a leading seed merchant since 1893.

HARGRAFT.—Alex R. Hargraft died suddenly

on August 29. Mr. Hargraft was a well-known grain man in Winnipeg. He served as president of the Grain Exchange for several years his first term starting in 1904. Mr. Hargraft was 59 years old.

JENKS.—James M. Jenks died on August 30, after two weeks' illness at the age of 69 years. Mr. Jenks was a member of the Nye & Jenks Grain Company. He started in the grain business 35 years ago in Michigan. He moved to Minneapolis in 1890 and organized Nye, Jenks & Co. In 1893 he organized the Nye & Jenks Grain Company at Chicago and Mr. Jenks became a resident of that city and a member of the Chicago Board of Trade.

LEMBKE.—Following an operation for appendicitis, F. L. Lembke died at Canton, Ohio. He was a representative of the W. W. Barnard Company.

MALONE.—M. J. Malone of Toronto, who until 1912 was in the grain business at Uxbridge, Ont., recently passed away. Since he left Uxbridge several years ago, he has been associated with the Department of Agriculture.

STEINMESCH.—Aged 69 years, Henry Steinmesch died from an operation for tumor of the kid-

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neys. Mr. Steinmesch was president of the Steinmesch Feed & Poultry Supply Company of St. Louis, Mo. For many years he had been in the employ of the Plant Seed Company and from 1876 to 1881 he was in the seed business for himself. His widow, two sons and a daughter survive him.

TAYLOR.—Aged 57 years, William C. Taylor died at Philadelphia, Pa., from injuries inflicted by a discharged employe. Mr. Taylor was a grain and hay dealer at Darby, Pa. He had been engaged in business in Delaware County for 35 years. His widow and daughter survive him.

GRAIN TRADE PATENTS

Bearing Date of August 12, 1919

Elevator for corn, etc.—John H. Gilman, Ottawa, Ill., assignor to King & Hamilton Company, Ottawa, Ill., a corporation of Illinois. Filed June 30, 1919. Original application filed December 17, 1914. Divided and application filed June 29, 1917. Original No. 1,303,552, dated May 13, 1919. No. 14,705.

Grain measuring and sack filling device.—Joseph J. Wojcik, Pulaski, Wis. Filed October 8, 1917. No. 1,313,149.

Grain weigher.—Chas. F. Clements, Peoria, Ill. Filed October 18, 1918. No. 1,312,832.

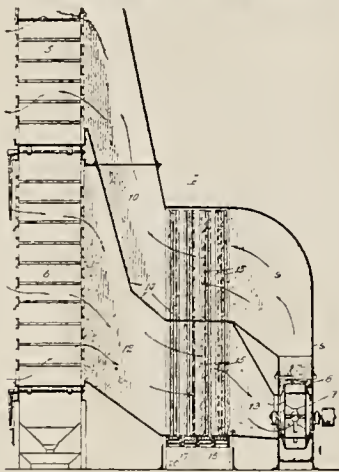
Grain treating apparatus.—Lenious D. Smith, Helix, Ore. Filed March 24, 1917. No. 1,313,027.

Machine for treating smut.—Alfred Struble, Fargo, N. D. Filed May 6, 1918. No. 1,312,647.

Bearing Date of August 19, 1919

Grain drier.—Hubert C. Ellis, Evanston, Ill., assignor to Ellis Drier & Elevator Company, Chicago, Ill., a corporation of Wisconsin. Filed January 2, 1919. No. 1,313,279. See cut.

Claim: In a grain drier, the combination of a grain shaft, a fan for forcing air through the shaft, intake



and outlet ducts for the fan, and air-heating means in both of said ducts whereby the atmospheric resistance in said ducts will be substantially balanced.

RECEIPTS AND SHIPMENTS

Following are the receipts and shipments of grain, etc., at the leading terminal markets in the United States for the month of August:

BALTIMORE—Reported by Jas. B. Hessong, secretary of the Chamber of Commerce:

Receipts		Exports	
1919	1918	1919	1918
Wheat, bus...	6,533,865	5,132,438	4,257,251
Corn, bus...	255,974	342,482	5,618
Oats, bus...	347,851	312,888	919,515
Barley, bus...	263,738	795,728	63,971
Rye, bus...	40,150	33,775	146,786
Hay, tons...	2,631	2,834	790
Flour, bbls...	128,212	97,016	80,751

CHICAGO—Reported by John R. Mauff, secretary of the Board of Trade:

Receipts		Shipments	
1919	1918	1919	1918
Wheat, bus...	21,413,000	27,250,000	14,827,000
Corn, bus...	3,296,000	5,254,000	1,910,000
Oats, bus...	12,318,000	22,765,000	8,321,000
Barley, bus...	1,324,000	1,365,000	972,000
Rye, bus...	783,000	694,000	45,000
Timothy Seed, lbs.	7,451,000	764,000	2,340,000
Clover Seed, lbs.	798,000	135,000	136,000
Other Grass Seed, lbs.	2,629,000	847,000	549,000
Flax Seed, bus.	77,000	12,000	6,000
Broom Corn, lbs.	4,609,000	1,543,000	1,038,000
Hay, tons...	15,432	19,185	931
Flour, bbls...	873,000	686,000	663,000

CINCINNATI—Reported by D. J. Schuh, executive secretary of the Cincinnati Grain and Hay Exchange:

Receipts		Shipments*	
1919	1918	1919	1918
Wheat, bus...	1,617,200	1,487,800	907,300
Corn, bus...	150,700	168,300	58,300
Oats, bus...	425,600	740,800	108,800
Barley, bus...	41,250	11,200	259,200
Rye, bus...	58,300	48,400	14,300
Ear Corn, bus.	12,600	23,100	28,600
Feed, all kinds, tons.	360	1,500	.....
Hay, tons...	6,588	6,150	.....

*This does not include shipments from track, but are only actual inspections made on outgoing grain from elevators and warehouses.

DULUTH—Reported by Chas. F. MacDonald, secretary of the Board of Trade:

Receipts		Shipments	
1919	1918	1919	1918
Wheat, bus...	267,698	275,774	167,721
Oats, bus...	234,410	32,572	94,685
Barley, bus...	757,376	3,593	881,063
Rye, bus...	882,439	1,561	590,000
Flax Seed, bus.	153,091	24,089	199,108
Flour, bbls...	.....	.....	96,926
Produced ..	63,925	48,420	.....
Receipts ..	460,700	610,970	547,685
			646,595

INDIANAPOLIS—Reported by Wm. H. Howard, secretary of the Board of Trade:

Receipts		Shipments	
1919	1918	1919	1918
Wheat, bus...	2,247,500	2,738,750	1,812,500
Corn, bus...	751,250	1,408,750	488,750
Oats, bus...	1,796,400	2,604,600	1,342,800
Barley, bus...	11,250	1,250	.....
Rye, bus...	76,250	171,250	43,750
			36,250

KANSAS CITY—Reported by E. D. Bigelow, secretary of the Board of Trade:

Receipts		Shipments	
1919	1918	1919	1918
Wheat, bus...	18,916,200	16,187,850	7,177,950
Corn, bus...	381,250	1,433,750	345,000
Oats, bus...	1,196,800	2,774,400	537,000
Barley, bus...	241,500	3,000	42,900
Kaffir, bus...	64,900	28,600	28,000
Flax Seed, bus.	.....	.....	114,000
Hay, tons...	48,408	38,508	13,584
Flour, bbls...	82,225	60,450	351,000
			247,000

MILWAUKEE—Reported by H. A. Plumb, secretary of the Chamber of Commerce:

Receipts		Shipments	
1919	1918	1919	1918
Wheat, bus...	779,880	3,429,400	78,632
Corn, bus...	739,626	628,460	461,181
Oats, bus...	3,729,830	3,774,400	2,477,734
Barley, bus...	1,453,820	881,280	591,151
Rye, bus...	192,650	191,925	150,032
Timothy Seed, lbs.	1,588	139,851	221,073
Clover Seed, lbs.	220,463	44,053	31,144
Flax Seed, bus.	10,305	13,500	.....
Hay, tons...	288	.....	468
Flour, bbls...	64,345	55,025	93,274

MINNEAPOLIS—Reported by Secretary of the Chamber of Commerce:

Receipts		Shipments	
1919	1918	1919	1918
Wheat, bus...	13,658,220	14,907,730	1,797,990
Corn, bus...	317,650	634,160	146,440
Oats, bus...	2,821,360	3,807,940	1,800,310
Barley, bus...	2,372,970	2,460,430	2,226,650
Rye, bus...	1,103,780	991,870	339,440
Flax, bus...	196,000	94,400	1,090
Millstuffs, tons	6,924	1,655	64,709
Hay, tons...	1,268	1,550	23,525
Flour, bbls...	32,520	47,403	1,422,514

NEW ORLEANS—Reported by Geo. S. Colby, chief grain inspector and weighmaster of the Board of Trade, Ltd.:

Receipts		Shipments	
1919	1918	1919	1918
Wheat, bus...	1,475,232	2,218,917
Corn, bus...	152,716	81,494
Oats, bus...	382,725	864,820
Barley, bus...	1,253,576	.....
Rye, bus...	1,082

NEW YORK CITY—Reported by H. Heinzer, statistician of the Produce Exchange:

Receipts		Shipments	
1919	1918	1919	1918
Wheat, bus...	9,335,600	3,676,967	.....
Corn, bus...	201,400	14,984	.....
Oats, bus...	2,039,900	2,359,271	.....
Barley, bus...	785,300	1,135,967	.....
Rye, bus...	1,250	278,166	.....
Timothy, Clover & other Grass Seed, bags	4,958	349	.....
Hay, bales...	18,863	1,700	.....
Flour, bbls...	668,574	935,885	.....

OMAHA—Reported by F. P. Manchester, secretary of the Grain Exchange:

Receipts		Shipments	
1919	1918	1919	1918
Wheat, bus...	5,588,400	4,659,600	2,846,400
Corn, bus...	1,075,000	2,773,400	1,121,400
Oats, bus...	1,068,000	2,504,000	976,000
Barley, bus...	118,800	115,200	142,200
Rye, bus...	152,900	35,200	155,500

PHILADELPHIA—Reported by Samuel S. Daniels, statistician of the Commercial Exchange:

Receipts		Shipments	
1919	1918	1919	1918
Wheat, bus...	5,188,540	4,262,693	3,140,696
Corn, bus...	113,256	66,644	65,973
Oats, bus...	813,287	623,638	749,811
Barley, bus...	298,617	3,750	630,537
Rye, bus...	16,310	41,333	.....
Flour, bbls...	84,469	79,787	93,522

PEORIA—Reported by John R. Loifgren, secretary of the Board of Trade:

Receipts		Shipments	
1919	1918	1919	1918
Wheat, bus...	714,600	1,895,300	802,400
Corn, bus...	646,950	2,145,250	879,350
Oats, bus...	851,000	1,789,800	453,400
Barley, bus...	246,600	61,800	161,000
Rye, bus...	12,000	25,200	10,800
Mill Feed, tons	6,160	5,780	11,680
Seeds, tons...	150,000	30,000	60,000
Broom Corn, lbs.	.....	105,000	.....
Hay, tons...	3,700	3,280	220
Flour, bbls...	283,800	301,000	248,800

PORTLAND, ME.—Reported by Geo. F. Feeney, traffic manager of the Chamber of Commerce:

Receipts		Shipments	
1919	1918	1919	1918
Wheat, bus...	29,584	190,693	.....
Oats, bus...	151,381	149,700	.....
Barley, bus...	91,501	142,550	.....

ST. LOUIS—Reported by Eugene Smith, secretary of the Merchants' Exchange:

Receipts		Shipments	
1919	1918	1919	1918
Wheat, bus...	9,402,432	13,914,313	6,013,900
Corn, bus...	719,213	1,131,662	552,450
Oats, bus...	2,399,000	3,106,505	1,427,850
Barley, bus...	107,200	48,025	9,710
Rye, bus...	62,903	55,336	49,010
Hay, tons...	14,311	16,459	4,695
Flour, bbls...	428,480	342,830	478,100
			342,830

SAN FRANCISCO—Reported by W. B. Downes, statistician of the Chamber of Commerce:

Receipts		Shipments	
1919	1918	1919	1918
Wheat, cts...	102,355	.....	2
Corn, cts...	6,127	.....	.....
Oats, cts...	30,007	.....	113
Barley, cts...	498,187	.....	354,261
Bran, tons...	190	397	.....
Beans, tons...	78,747	30,401	.....
Hay, tons...	13,206	11,379	427
Flour, bbls...	235,670	.....	187,361

TOLEDO—Reported by Archibald Gassaway, secretary of the Produce Exchange:

Receipts		Shipments	
1919	1918	1919	1918
Wheat, bus...	1,671,800	1,616,700	334,700
Corn, bus...	46,250	121,400	8,570
Oats, bus...	500,300	2,585,200	374,980
Barley, bus...	9,600	1,200	.....
Rye, bus...	240,000	70,800	21,205
Timothy Seed, bags	17	612	13,934
Clover Seed, bags	24	122	372
Alsike, bags...	2,145	2,979	415
			582
			679

WHEAT AND FLOUR SUPPLIES

The United States Grain Corporation issued its weekly bulletin covering the wheat and wheat flour movement throughout the United States for the week ending August 29, in comparison with the figures for the same period a year ago. Figures given out were as follows:

	1919	1918
Wheat receipts from farms, bushels.....	40,675,000	32,270,000
Wheat receipts from farms, previous week, bushels	43,322,000	30,030,000
Wheat receipts from farms, June 27 to August 29, bushels.....	329,723,000	276,051,000
Flour produced during week, barrels.....	2,904,000	2,131,000
Flour produced previous week, barrels.....	2,837,000	2,499,000
Flour produced June 27 to August 29, barrels...	19,278,000	16,567,000
Total stocks, wheat, all elevators and mills, bushels	214,838,000	160,412,000
Total stocks, wheat, all elevators and mills, previous week, bushels...	189,353,000	142,963,000
Change for week, bushels...	25,485,000 inc.	17,449,000 inc.

MINOR MENTION

IT is reported that 4,000 women are included in the membership of the Saskatchewan Grain Growers Association.

NORTHWESTERN farmers are being urged to save selected wheat for seed next year. Light weight and shrunken grain makes poor seed.

INCORPORATION papers were filed at Rhinelander, Wis., by S. A. Dalson, E. W. Swedburg and O. C. Nelson as the Northern Hay & Grain Company. The firm is capitalized at \$5,000.

INSTRUCTIONS have been issued to the Great Northern and Northern Pacific by the Federal Railroad Administration putting into effect in Montana the special rates for shipment of seed and stock feed and livestock.

THE sorghum crops of Kansas, under extreme dry weather conditions, are 24 to 32.1 points higher in condition than corn in the same location. But in spite of this favorable record, the sorghum acreage decreased about 40 per cent in the state this year.

TERMINAL elevators of Canada have petitioned the Grain Commission to raise the handling rate from $\frac{3}{4}$ to $1\frac{1}{4}$ cents, and to put the cleaning rates on a graduated scale from $\frac{1}{2}$ cent per bushel, to $1\frac{1}{2}$ cents where more than 10

GOODRICH "LEGRAIN" *ELEVATOR* BELT

"LEGRAIN" is the acme of Grain Lifting Belts. It has been installed in the largest legs of many important Terminal Elevators and Milling Plants, as well as in smaller, tho equally important Country Elevators. Everywhere it has been an unqualified success, effecting a continuous, steady distribution of Grain. May we send you full details of our product?

GOODRICH "CARIGRAIN" BELT

This represents the highest development of the Conveyor Belt for Grain Handling. Its extreme toughness and flexibility, its perfect adaptability for use with troughed or flat idlers, and its remarkable long-aging qualities, make "CARIGRAIN" a profitable purchase that will "carry-on" with almost indefinite persistence. Write us today.

THE B. F. GOODRICH RUBBER COMPANY
The City of Goodrich—AKRON, OHIO



HAY, STRAW AND FEED

"A WORD TO THE WISE"

Albert Miller & Co., of Chicago, in a recent hay letter say:

"Be a scientific shipper. Study the market. Ship when conditions promise you the biggest profits. In other words ship your hay so that when it arrives it should strike a higher market. Our present market promises to advance immediately. Now, therefore is the time to ship. Any shipments now promise to arrive on a higher market. Don't wait until prices are at the top. After each advance in prices there is a break."

NAPIER GRASS

Napier grass or Napier fodder, sometimes incorrectly called Japanese bamboograss, which was introduced into this country by the Department of Agriculture in 1913, has proven successful in numerous tests, and has proved hardy as far north as Charleston, S. C. It is a perennial, is strongly resistant to drouth and may be expected to succeed wherever sugar cane can be grown.

The mature stems or canes of Napier grass are fibrous and woody, and do not make suitable fodder, but the leaves and young cane have proved excellent for cattle and horses. By cutting at this stage three or four crops are realized each season. The grass is also used for pasturage but cannot withstand continuous close pasturing.

While still in the experiment stage as a forage plant, Napier grass has given very encouraging results in Florida and California.

RELATIVE FEEDING VALUES OF ALFALFA
HAY AND ALFALFA MEAL

The value of alfalfa as a feed is so well recognized that discussion of it is superfluous. However, there is some divergence of opinion on the relative feeding values of alfalfa as hay, and ground up, as meal. Manifestly, grinding the hay into meal adds nothing to its nutritive value, though it may increase its digestibility somewhat.

The advantages derived from grinding alfalfa into the form of meal are chiefly that it can be more easily shipped, with less loss and waste in shipping and feeding. The cost of freight and warehouse charges are also less for the meal than for the hay. The market price of the meal is usually one-fifth above the hay. The New Jersey State Department of Agriculture summarizes the situation as follows. "Alfalfa contains no more nutrient when ground than before, and grinding should be considered a desirable practice only when it facilitates shipping or when needed in a special form for poultry or other stock."

HORSE PUBLICITY ASSOCIATION FORMED

A meeting of the representative grain, hay and feed merchants of Greater New York held at the Pennsylvania Hotel on Tuesday, September 9, to discuss methods for combating the substitution of the motor truck and farm tractor for horse drawn vehicles, resulted in the formation of a temporary organization which was given the name of the "Horse Publicity Association" of America.

As the name implies, the object of the Association is to give the horse some publicity and to present the facts of the comparative costs between gasoline and horse power for haulage and farm work.

The attendance at the meeting was representative of all branches of the distributing end of the grain, feed and hay trade, together with the feed manufacturing interests. Those in attendance were: L. G. Leverich, president of Shaw & Truesdale; Clarence S. Betts, treasurer and general manager; Wm. H. Payne & Son; Harry G. Gore, president Harry G. Gore Company, Inc.; J. C. Overfield of the H. W. Simonson Company, of Newark, N. J.; J. W. Gasteiger, Jr., of John W. Gasteiger & Son; S. A. Vroman, president, New York Hay Exchange Association; H. K. Palmer, New York manager, for Chas. A. Krause Milling Company, Milwaukee, Wis.; H. S. Lockwood, sales agent for American Steel & Wire Company; Thomas M. Blake; N. A. Dillon-

beck; Roscoe Tygert; Fred. W. Williams; J. C. Bush; Frank Dusenberry, of Dusenberry & Co.

Intense interest was shown in the subject and after general discussion it was decided to form a temporary organization to perfect preliminaries for a general meeting to be held in October, to which all the interests identified with advertising the horse will be invited, and a permanent association formed for exploiting the horse. The following officers were elected:

President, Fred. M. Williams; secretary, Leonard Gibson; treasurer, Thomas M. Blake. The meeting adjourned subject to the call of the chairman.

TIME FOR CUTTING ALFALFA

The time for cutting alfalfa has much to do with its yield, says the *Omaha Journal*, in a recent issue. Experiments were made for total yields per season when alfalfa was cut two, three, four and five times. Three or four cuttings, depending on the season, gave largest yield for that section of Nebraska.

There are two indices for the proper harvesting time. They are the appearance of the first bloom and the starting of a new growth at the crown and lower part of the old stems. Cuttings should begin at the appearance of either index.

Experiments also show that getting the hay into the stock or barn at the proper time means a saving of more leaves, which form 50 per cent of the value of the day.

In good drying weather a half day or less in the swath and a day in the windrow will ordinarily do. Rain or dew is more likely to cause mold in the stack than the moisture in the plant. It is often better to stack a little green and let the hay "brown cure" than to have it rain on or lose too many leaves.

BETTER BALES FOR HAY

Uncle Sam wants to help every farmer to make the most of his surplus hay crop, and hence he has just published Farmers Bulletin 1049, which is replete in helpful hints and practical suggestions on when, why, and how to bale hay and manage baling crews.

Hay is graded according to the way in which it is baled. Bales of uniform size and of neat, attractive appearance bring top prices, other conditions being equal, while ragged, unsightly bales are penalized. In baling hay for market, various practices are in operation; some are followed unconsciously or in order to avoid extra work, while others are followed deliberately with intent to deceive the buyer, which tend to lower the market value of hay in the bale irrespective of its actual quality.

The size of bale that a press makes sometimes has a great effect on the selling price of the hay. On some markets the difference in selling price between hay in large bales and that in small bales is considerable. The successful grower of market hay keeps informed as to just what the market, to which he ships his hay, demands in type, size, and weight of bale. Some feeders object to tightly baled hay, because they believe that the "life" is pressed out of such bales. Some prefer the large, loosely pressed bales, believing that the hay in them has a greater feeding value than that in small, heavily pressed bales. Occasionally small bales are desired on account of the ease with which one man can handle them or because it is easy to detect the presence of spoiled hay in them. To realize the greatest possible profit from the sale of his hay, the hay grower must put his hay into a bale that will meet the feeder's ideas rather than his own.

In shipping baled hay it frequently happens that it is not possible to load to even the minimum weight with lightweight bales if the car is of the older and smaller type. In some instances it is impossible to load the minimum weight into a car with bales weighing from 60 to 70 pounds, whereas if the same-sized bale contained from 90 to 100 pounds this difficulty would not be experienced. It is important to make bales that will at least load cars to their minimum weight, provided a serious

discrimination in price does not result from their being overweight. In a few instances the trade will now take a heavier bale than formerly and pay the same price a ton as for the lighter bale. The feeding value of hay is not impaired in the least when it is tightly baled.

HAY LOWER IN NEW YORK

BY C. K. TRAFTON

As a rule the action of the New York hay market during August was sluggish, and disappointing to practically every member of the trade. Frequently there was a striking absence of positive clear-cut form, conditions generally being so unsettled as to make analysis extremely difficult, but this being the switching period from the old to the new crop season no astonishment was manifested. Doubtless the fact that supplies of old crop hay had been virtually wiped out, forcing prices to abnormally high levels, served to make the confusion and unsettlement more pronounced than usual. Hence it was by no means strange that the majority of buyers were disposed to follow a decidedly cautious attitude. In fact, many of them seemed actually afraid to buy anything whatever, being convinced that it would pay them to refrain from buying as much as possible. Their argument was that the prices ruling at the end of July fully discounted the complete exhaustion of the old crop and that as soon as the new crop was cut or began to move from the farms a sharp downward revision of prices was inevitable. Of course, such ideas are always popular among buyers during mid-summer, but on this occasion it seemed especially justified on account of the many highly gratifying crop reports received early in the season. It is true; the August report of the Department indicated a crop about 5,000,000 tons below the forecast made in July, but at the same time the indication was still a liberal one, 110,876,000 tons, against 89,833,000 tons harvested last year. Another factor, and a decidedly unusual one, tending to strengthen the predictions of lower prices was the universal fight to bring down the price of all commodities. The drastic measures adopted by state and Federal authorities encouraged the belief that holders of hay, as well as of all other goods, would be eager to sell at the best prices obtainable, rather than hold for higher prices at the risk of being attacked as hoarders and profiteers.

In the face of the depressing factors mentioned, hay prices sagged off to such a small degree as to create general surprise and disappointment, especially among distributors and small dealers. Doubtless, the most logical explanation for this relative steadiness was the circulation of less optimistic crop advices. Reports from the West stated that the yield in many places was falling short of general expectations. This was noticed particularly in the Northwest where the prolonged drouth and extremely high temperatures had caused wide-spread damage, much of the hay being burned or prematurely ripened. In marked contrast, many growers in the East asserted that their fields had been badly injured by an excess of moisture and unseasonably cool weather. These unofficial advices were subsequently confirmed to some extent by the Agricultural Department's September report, which reduced the crop promise to 102,000,000 tons. Using this figure as a basis, many experienced and conservative members of the trade expressed the belief that farmers and interior holders would not be willing to accept much if any less than \$35 to \$36 for choice grades or No. 1 timothy in large bales. A moderately large percentage of the arrivals, as usual at the beginning of the new season, has been of inferior quality, some of it being slightly warm or otherwise damaged. Naturally, it has been found extremely difficult to dispose of this poor trash at any price, sellers in some cases being glad to accept as little as \$19 to \$20. On the decline fancy light clover-mixed has sold fairly well, but most of the poor grades were virtually ignored by buyers.

Early in the month little interest was displayed in straw, and hence prices were irregular and barely steady, sales of No. 1 being made at about \$14.50 to \$14.75. Subsequently there was a marked improvement in the demand and a simultaneous remarkable decrease in arrivals, and as a consequence the tone speedily became much stronger. Stocks of No. 1 became extremely light and \$16 to \$17 was secured on the New York market without any trouble.

Hay, Straw and Feed continued on page 236.

HENRY H. FREEMAN & CO.

Hay, Straw and Grain
COMMISSION MERCHANTS

Correspondence and Consignments Solicited.
Market Reports on Application.

66 Board of Trade

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are being harvested under ideal weather conditions. Prices have struck bottom. Buy and store now. Get our delivered prices.

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L	We are the Largest Distributors	L
F	of ALFALFA in	F
A	GREATER NEW YORK	A
L	Shippers who have Alfalfa Hay to dispose of, if they will	L
F	communicate with us we will provide a satisfactory outlet.	F
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Farmers WANT *Ankorite* ^{steel drive} Posts

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We want *you* to be that dealer. Sit down right now and drop us a letter or postcard. Just say "Send me details of your dealer proposition and co-operative sales plan." We'll do the rest.

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This Official Brown-Duvel Moisture Tester FOR GRAIN, SEED, FLOUR, FEED, Etc. Guaranteed true to Government Specifications



Price, including all accessories.

1 Flask	\$25.00	Less	For alcohol,
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Includes self measuring oil faucet and strainer tank. Our new electric heaters are regulated by thumb screw, same as a lamp.

We supply also all apparatus for grain inspection and grading, dockage sieves and scales, bushelweight testers and funnels, sample containers, grain probes or triers, etc., etc. Write for booklet.

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For Grain and Seed.
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HAY AND FEED NOTES

J. T. Temple has purchased the Parker Feed & Fuel Store at Osawatomie, Kan.

A feed store is to be added to the Farmers Elevator at Galesburg, N. D., it is reported.

The Wolston Hay Company has been recently registered to conduct a business in Montreal, Que.

J. A. Allan has purchased from Paul Lotzer the feed, flour and produce business at Dorchester, Wis.

R. P. Lipe, registered, operating at Montreal, Que., has sold his hay business to A. N. Deringer of Montreal.

Cameron & Campbell of Maxville, Ont., flour and feed merchants, have dissolved. W. D. Campbell will continue the business.

An addition is being built to the establishment of Webber & Sons at Martins Ferry, W. Va., doubling their handling capacity for feed.

The Blatchford Calf Meal Company of Canada, Ltd., has been incorporated with a capital stock of \$75,000. The head office will be located at Toronto.

A new feed house is to be built at Eldon, Mo., for the Rock Island Elevator Company. The house will be on a Missouri Pacific right-of-way and will

be 30x70 feet. This feed house will be conducted in connection with the company's elevator, feed mill and coal bins.

C. R. Garner, R. C. Ware and J. J. Bond have filed incorporation papers at Dallas, Texas, as the Interstate Feed Company. The firm is capitalized at \$10,000.

The Atlas Flour & Feed Company has been incorporated at St. Louis, Mo., by W. T. Bledsoe, E. Zimbel and W. J. Weisehan. The company will conduct a feed and flour jobbing and brokerage business.

At the Kelso Feed & Fuel Company, Kelso, Wash., they are handling, elevator and conveying their grain by power. Machinery and material was furnished by the J. J. Ross Mill Furnishing Company of Seattle, Wash.

The Majestic Products & Supply Company has purchased the Matfield Warehouse at Batesville, Ark., and will conduct a feed and flour business. E. E. Davis is general manager and G. M. Kirby local manager of the firm.

The Lyons-Kuehn Company has been organized to conduct a feed and flour jobbing business at Minneapolis, Minn., capitalized at \$100,000. Frank L. Lyons, Wm. R. Kuehn, Pearl B. Lyons and Hattie C. Kuehn are interested.

ing requirements, but because the rye had not been threshed at planting time and therefore the vetch seed was not available for planting when it was needed.

"It is evident that there will be a great demand for vetch seed for planting this fall. There is an indication that the farmers will give less attention to keep their stocks of Rosen rye free from vetch this fall because this variety is becoming more common, and it appears to them improbable that the large premiums for the Rosen rye seed that have been obtained recently will be offered next year. The inducement to sow vetch because of the high price of vetch seed and the fact that it is also taking the place of clover seed to some extent because of the very high price of clover seed are also factors in bringing about a large demand for vetch seed. Prices have advanced until on August 30 they ranged from 25 to 35 cents per pound."

SEED ACTIVITY CONTINUES IN NEW YORK

BY C. K. TRAFTON

August continued July's record of smashing the time-honored precedent of "mid-summer dullness" in the New York seed market. Needless to say, some varieties were as dull as usual, but in others there was striking animation. Red clover and alfalfa were the leaders, chiefly because the remarkably heavy seeding demand found supplies of domestic seed utterly inadequate, leading to a large business in seed imported from Italy and France, the arrivals of which were enormous. This activity was accompanied by great irregularity in price fluctuations, some of which were of considerable importance.

It being generally conceded that the prospect for our own crops of the two varieties mentioned is decidedly poor, the arrivals from Europe have met with an urgent demand from all along the Seaboard. The imports were so huge as to cause a break of two to three cents in alfalfa. Red clover held its own, while crimson clover, which also arrived in liberal volume, fell about one cent.

The poor prospect for the domestic alfalfa crop led to free buying of Italian seed for Western account. As a consequence, supplies available for export from Italy have been virtually wiped out. The new crop in that country is a failure, so that additional lots for shipment have been extremely difficult to locate at any price. The same is also true to a large extent in France where the protracted drouth caused a disastrous reduction in the yield. About 2,250 bags were imported here during the month.

The imports of crimson clover, however, were the most remarkable, being about 11,700 bags. The steamer *Portugese Prince*, brought what was said to be the largest cargo of the kind ever known, about 9,500 bags. This was said to represent the cleaning-up of various shipments which had accumulated at French ports late in July because of shipping difficulties. Little of the domestic crop has appeared in the market as yet. The bulk of it is still held by growers, but it is not expected to last long at the present rate of demand. Red clover has sold at the highest price on record, 47 cents, as a result of the entire elimination of domestic supplies. In addition, liberal arrivals from abroad, roundly 8,200 bags, chiefly from Italy, were speedily taken up without any appreciable effect on prices. Italy is now said to be virtually eliminated as a source of supply as the old crop is sold out and the new one is a failure.

There have been some offerings of the 1919 French crop at 45 cents c. i. f. New York, September shipment, but they were not of particularly desirable quality. According to local dealers, indications are for an unusually large crop in Wisconsin, fair yields in Illinois, Indiana and Iowa, and a shortage in Ohio and the far West. Samples of the new crop received were not favorably described.

Timothy was one of the varieties to drop in value owing to the large carry-over and a disappointing export trade. The movement toward the Seaboard for shipment is under way, but nothing has been sold, aside from a few lots for Scandinavia. Hopes of a brisk demand from central Europe have not been realized, no business having developed as yet from the inquiries mentioned last month.

Nevertheless, this variety has some strong friends who consider it the "best buy" on the list, especially in view of the big discount at which it is selling. They are convinced that various strong interests are merely standing by, waiting for a further drop in prices in order to stock up freely. It is argued that central Europe must have the seed and that the necessary funds will be provided. It is merely a question of fixing prices and arranging credits. The latter problem is being solved and doubtless shipments will be under way this fall. The seeds will not be needed in Europe until January, which will permit of planting in March.

Alsike is another variety some times mentioned as a decidedly attractive purchase, some sagacious traders believing that it will be even more popular than timothy as a substitute for red clover. The

FIELD SEEDS

NEW SEED TRADEMARK

The following new seed trademark was published in August in the *Official Gazette*, issued by the

Parkway

United States Patent Office: "Parkway" grass seed. Ivan Ostberg, Chicago, Ill. Filed April 28, 1919. Serial No. 117,945. See cut.

CLOVER SEED IMPORTS

With the removal of war restrictions and the increase in shipping facilities imports of clover seed have largely increased. The Government figures for August put the imports of alsike at 204,900 pounds, against 226,000 pounds a year ago, of crimson at 955,500 against none in August, 1918, of red at 562,000 against 43,600 in August, 1918. There is no record of imports of clover mixtures during the past month.

Total figures for the eight months ending August 31 show 3,656,400 pounds of alsike, 2,647,300 pounds of crimson, 2,263,900 of red and 700 of white clover. These show an increase of nearly a million pounds for alsike over the corresponding period in 1918, and an increase of about 2,000,000 pounds each for crimson and red.

IRELAND'S 1919 RYEGRASS CROP

Ireland's 1919 ryegrass crop has been harvested in ideal weather conditions, and is now quite safe in ricks. Condition, color and bushel weight quite satisfactory. The hay crop is lighter than general, but reports of results of first threshings would indicate something like a normal yield per acre. Bushel weight will be slightly under that of last season, and will average, for machined perennial about 26 pounds and Italian about 20 pounds. There does not appear to be an increase in the area seeded for perennial or Italian ryegrass, but the acreage under mixed ryegrass has been somewhat extended. On account of the relaxation of export restrictions, and possible increase in home consumption it is natural to expect a good demand for ryegrass seeds during the ensuing season.—*McClinton & Co., Belfast, Ireland, in Letter of August 8.*

SEEDS SOLD IN WISCONSIN MUST BE LABELED

The Department of Agriculture of Wisconsin is busy sending out warnings to the farmers of the state who propose to sell winter wheat, winter rye, timothy seed and other seeds for fall seeding, that the law requires all of these seeds to be tested for their fertility before they can be offered for sale. They have been told by the state officials that the laws provide under the state Seed Inspection Act that seeds offered at retail must be labeled with percentage of purity and germination.

Agents of the state Department will be sent throughout the state who will collect samples of seed here and there, and if the seed does not live up to the statements on the label, there will be immediate danger of prosecution. Samples can be sent to the state seed inspector, Madison, who will immediately ascertain for a fee of 25 cents whether the seed lives up to the label.

This law means that those who wish to buy the famous pure bred seeds produced in Wisconsin, which have a reputation in all parts of the world, can do so practically without taking any risk of loss from purchase of poor lots. The law is framed to protect the buyer of seeds and the past has shown that the law will be enforced strictly.

QUARANTINE OF SEED IMPORTS PARTLY LIFTED

The Department of Agriculture has ordered the relaxation of Quarantine No. 37 so as to permit the importation of seeds, plants and nursery stock from contiguous countries, where such entry will not be attended by a serious risk to the agriculture, horticulture and floriculture of the United States. It takes the form of an amendment known as "No. 3 to Regulations Supplemental to Quarantine No. 37," and was effective last month. Under it the Secretary of Agriculture may issue permits, when applications are made, authorizing the entry into the United States of such nursery stock, other plants and seeds when they are free from disease and insect pests, and it is known that their entry will not be attended by serious risk.

Importations under this new regulation are limited to specific classes of nursery stock, plants and seeds which can be considered as peculiar to such contiguous countries, and are not mere reproductions of imported stock from foreign countries, and which are not available in sufficient quantities in the United States. It does not apply to plants and seeds governed by special quarantines and other restrictive orders other than Quarantine No. 37, which is now in force.

In addition to the certificate as to freedom of pests required in connection with all plant importations, the invoice covering the material offered for entry under this regulation must be accompanied by a certificate of a duly authorized official of the country of origin, stating that the material has been produced or grown in the country from which it is proposed to be exported.

THE HAIRY VETCH SEED CROP

The latest *Seed Reporter*, issued by the Bureau of Markets, says in regard to hairy vetch:

"It is estimated that the seed crop of hairy vetch in Michigan this year will be about one-half of normal. Earlier it was thought that the greatly increased acreage of rye sown in Michigan last fall indicated an increased acreage of hairy vetch, for it is a common practice to sow hairy vetch with winter rye. However, other factors tended to reduce the acreage and also the yield per acre this year among which are:

"(1) The planting of a large acreage of the new Rosen rye which was free from vetch, and was kept free so that it could be sold for seed this season and thus bring a large premium over commercial or common seed; (2) the damage to the crop by hot, dry weather and grasshoppers; (3) the loss in vetch seed by shattering because of its ripening this season in many fields about two weeks before the rye; and (4) the insufficient supply of vetch seed in some sections last fall for planting requirements. This latter factor did not exist because vetch seed was not produced last season in sufficient quantity to satisfy local plant-

fact that the crop promises to be ample is regarded as fortunate inasmuch as it will have to cover all requirements, there being no old-crop surplus. Demand from Eastern planters has been brisk and there has been an active inquiry from northern Europe, several lots having been sold for late shipment. Although prices have sagged slightly under the weight of the new crop movement and because of the bright crop outlook, some of the best informed dealers expect higher levels ere long. They pay little attention to the present disappointing status of the trade with Great Britain, contending that it is traceable wholly to the remarkable exchange situation. The demand is known to exist and they believe that credits will be satisfactorily stabilized in the near future.

Red top, the only variety besides timothy with a large old-crop surplus advanced from 3 to 4 cents. In short, the surplus proved to be far from burdensome because of the belief that the new crop would be abnormally short. This induced free buying of old-crop seed by those who feared that the new would not be sufficient for all requirements.

Kentucky blue grass also showed strength. Further buying was reported for export to the British Isles and available supplies proved to be inadequate. They were decidedly disappointing to those who had sold "short" earlier in the season at 21 to 22 cents. Some of these sellers were forced to pay 23 to 26 cents in order to make good on their contracts.

Rapeseed has been in good demand with spot stocks extremely limited and only trifling offerings from Japan where the bulk of the supply was taken up by pressers for direct oil shipments to Europe. The few offers reported were mainly in 25 to 50-ton lots at 9¼ cents c. i. f. Pacific Coast ports, September-October shipment. New crop French and Dutch rapeseed is quoted at 14 cents c. i. f. New York.

Sunflower seed of domestic growth is entirely exhausted, and hence a large business has been done in Argentine seed. Available supplies in that country have been greatly reduced, and therefore little can be expected in the way of new supplies until our new crop becomes available. New Argentine seed will not be ready for market until April or May. Spot sales were made recently at 11 cents for car-lots and 11¼ cents for smaller lots.

Imports of Canary seed from Argentina have aggregated between 3,000,000 and 4,000,000 pounds, and this has supplied practically all the trade, on a basis of 11½ cents for car-lots and 12¼ cents for smaller lots. Morocco seed at about 1 cent higher has received little attention. According to latest advices, Argentina has little left to offer.

There has been little animation in other varieties and prices are without essential change. Included in the month's imports were about 3,100 bags of orchard grass and 400 bags of rye grass. Only one shipment of any importance was reported from New York, 349 bags of clover seed to France.

The seed plant of J. M. Schultz at Dieterich, Ill., which was destroyed by fire, is being rebuilt.

The capital stock of the Smith Seed & Feed Company at Danville, Va., has been increased from \$30,000 to \$75,000.

A \$20,000 warehouse is being built at Missoula, Mont., for the Great Western Seed Company. The firm will handle seed peas on a large scale.

The Renville County Pure Seed Company has been incorporated at Olivia, Minn., by A. A. Chapman and J. C. Schriebl. The company will erect a concrete corn drier and storage house.

A branch house has been opened at Monmouth, Ill., by the E. G. Lewis Seed Company of Media. A building has been leased by the company for one year at the end of which time, the firm will build.

C. H. Mastin is succeeded at Newburgh, N. Y., by the C. H. Mastin Seed Company. James J. Dunlap and H. D. Calver are now associated with him. The large growth of the business led to this change in the concern.

J. E. Higbee, Roy R. Hattman and Albert F. Loeffler have incorporated at LaCrosse, Wis., as the LaCrosse Seed Company, capitalized at \$25,000. The company will raise and sell seeds, both wholesale and retail.

B. B. Blotz and A. A. Henneman have organized a company to be known as the Blotz-Henneman Seed Company and will conduct a business at Rocky Ford, Colo. They will occupy the seed cleaning plant and elevator built last summer by

the Trinidad Bean & Elevator Company of Trinidad, Colo. The new firm will do custom cleaning and a general wholesale business.

The capital stock of the A. A. Berry Seed Company at Clarinda, Iowa, has been increased to \$500,000.

The capital stock of Wood, Stubbs & Co., of Louisville, Ky., has been increased from \$250,000 to \$500,000. All the wholesale and out of town

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sell all varieties
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field seeds

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MINNEAPOLIS CHICAGO

Business will be conducted from the warehouse at 14th and Walnut Streets; retail and local trade will be handled from the Jefferson Street Store.

Orange Swan has moved his seed store into building at 1814 Main Street, Dallas, Texas, which he recently leased.

A seed cleaning plant and large warehouse is to be erected at Fargo, N. D., for the Interstate Seed & Grain Company.

The Robinson Supply Company has sold its seed and implement business at Lexington, Va., to Harper & Agnor.

A five-story building is to be erected at Evansville, Ind., for the Ohio Valley Seed Company. The capital has been increased from \$25,000 to \$100,000.

L. L. and Q. M. Simms have entered into business at St. Augustine, Fla., as the Lahomach Seed Company. They were formerly associated in the Mann-Hodge Seed Company of Palatka, Fla.

Frank Leckenby is president; L. C. Barrett, secretary and treasurer, of the new Northwest Pacific Seedmen Association organized at Spokane, Wash., by Washington, Oregon, Idaho and Montana seedmen. John Anderson, F. E. Barkenmeyer, C. L. Leslie and Geo. S. Reed are the directors.

The "American Grain Trade" has been advised that the seed firm of Ed. F. Mangelsdorf & Bro., mentioned in last month's issue as having succeeded the Mangelsdorf Seed Company at Atchison, Kan., has not started in business at Atchison but at St. Louis, Mo. There has been no change in The Mangelsdorf Seed Company at Atchison and the firm will continue under the same management as in the past.

Offices have been opened at 633 Hearst Building, Chicago, by the Kimball-Martindale Company with C. D. Potter in charge as sales manager. The company has purchased the mill and warehouse formerly owned by the Washburn-Crosby Company and remodeled same into terminal elevator and storage warehouse. Machinery for cleaning, polishing, hand picking and bagging beans and peas has been installed. The warehouse is equipped with automatic conveyors and pilers and will accommodate over 100 cars.

For Sale

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

ELEVATORS AND MILLS

BUSINESS OPPORTUNITY

Good man wanted to buy or operate an elevator. J. W. WOODRUFF, Hamburg, N. Y.

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Grain elevator for sale. Also three fine business lots and 40-acre farm with fine residence. E. HAUTERBROOK, Green Bay, Wis.

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Elevator and malting plant located at Davenport, Iowa. Grain elevator 220,000-bushel storage capacity. Malt house 1,800-bushel daily capacity. Situated on the C. R. I. & P. Ry. tracks, and C. M. & St. P. and C. B. & Q. Roads are available. Transit privileges are granted for Eastern and Southern points, and the location is very favorable for distribution of feeds and grain to these points as well as to the central feeding district. The location is in one of the best farming districts. Plant is in good physical condition and was operated until malt was prohibited. For particulars apply to DAVENPORT MALT & GRAIN COMPANY, Davenport, Iowa.

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Miscellaneous Notices

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

WANTED

Draftsman on grain elevators. Eastern location. State age, experience and salary desired. DRAFTSMAN, Box 9, care "American Elevator and Grain Trade," Chicago, Ill.

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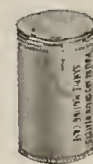
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Witt, Frank A., grain commission and brokerage.

KANSAS CITY, MO.

Addison Grain Co., grain commission merchants.
Moore-Lawless Grain Co., grain receivers.*
Moore-Seaver Grain Co., corn and oats.*
Peppard Seed Co., J. G., alfalfa seed, millet.
Rudy-Patrick Seed Co., seeds.
Simonds-Shields-Lonsdale Grain Co., wheat, kaffir, oats, corn.*
Thresher Fuller Grain Co., commission.*
Western Grain Co., shippers grain and feed.*

LANCASTER, PA.

Eby & Sons, Jonas F., receivers and shippers.*†

LIMA, OHIO.

Pollock Grain Co., wholesale grain, hay.*

LOUISVILLE, KY.

Edinger & Co.,† grain, hay, feed.
Farmer & Sons, Oscar, grain, hay, feed.*†
Williams & Monroe, grain, stocks, cotton.

MEMPHIS, TENN.

Browne, Walter M., grain, hay, mill feed.*
U. S. Feed Co., receivers and shippers.*†

MILWAUKEE, WIS.

Bacon Co., E. P., grain commission.*
Cargill Grain Co., receivers and shippers.
Courteen Seed Co., seeds.
Donahue-Stratton Co., buyers and shippers.*
Flanley Grain Co., grain.
Franko Grain Co., receivers and shippers.*
Kamm Co., P. C., grain merchants.*
Kellogg Seed Co., seeds.
Milwaukee Grain Commission Co., grain.
Mohr-Holstein Commission Co., grain com.*
Taylor & Bournique Co., corn, oats, barley.*
Thayer & Co., C. H., commission merchants.*

MINNEAPOLIS, MINN.

Cargill Elevator Co., grain shippers.*
Cereal Grading Co., grain merchants.*
Godfrey-Blanchard Co., grain commission.*
McCaull-Dinsmore Co., com. merchants.*
Quinn, Shepherdson Co., grain merchants.*
Scroggins-McLean Co., The, wheat shippers.*

NEW YORK, N. Y.

Brainard Commission Co., oats, barley.*
Forbell & Co., L. W., com. merchants.*
Power & Co., W. D., hay, straw, produce.*†

PEORIA, ILL.

Buckley & Co., grain, hay, seeds.*
Bowman & Co., Geo. L., grain commission.
Colc Grain Co., Geo. W., grain receivers.*
Conover Grain Co., E. B., receivers, shippers.
Dewey & Sons, W. W., grain commission.*
Feltman Grain Co., C. H., grain commission.*
Grier & Co., T. A., grain commission.*
Luke Grain Co., grain commission.*
McCree & Sons, J. A., com. merchants.*
Miles, P. B. & C. C., grain commission.*†
Mueller Grain Co., receivers and shippers.*
Rumsey, Moore & Co., grain commission.*
Slick, L. E., receivers and shippers, cash grain.
Smith-Hamilton Grain Co., grain.*
Warren Commission Co., consignments.*

PHILADELPHIA, PA.

Lemont & Son, E. K., wheat, corn, oats, feed.*†
Miller & Sons, L. F., receivers and shippers.*†
Richardson Bros., grain, flour, mill feeds.*
Rogers & Co., E. L., receivers and shippers.*†
Young & Co., S. H., grain, flour and feeds.

PITTSBURGH, PA.

Foster Co., C. A., wholesale grain, hay.*†
Harper Grain Co., grain commission.
Heck & Co., W. F., grain, hay, mill feeds.*†
Herb Bros. & Martin, grain and hay.*†
McCague, R. S., grain and hay.*†
Rogers & Co., Geo. E., receivers & shippers.*†
Walton Co., Samuel, hay, grain, mill feed.*†

RICHMOND, VA.

Beveridge & Co., S. T., grain, hay, feed.*†
Southern Brokerage Co., hay, grain, feed.*

ST. LOUIS, MO.

Elmore-Schultz Grain Co., receivers shippers.*†
Goffe & Carkener Co., grain, hay, seeds.*†
Graham & Martin Grain Co., rec. exclusively.*†
Langenberg Bros. Grain Co., grain com.*†
Marshall Hall Grain Co., receivers, shippers and exporters.*
Mason Hawpe Co., grain merchants.*
Mullally Hay & Grain Co.*†
Nanson Commission Co., receivers, shippers.*†
Picker & Beardsley Com. Co., grain, hay.*†
Powell & O'Rourke Grain Co., receivers, shippers, exporters.*
Prunty, Chas. E., grain and seeds.
Schisler Seed Co., A. W., field and garden seeds.
Secle Bros. Grain Co., commission.*
Toberman, Mackey & Co., grain, hay, seeds.*†
Turner Grain Co., grain commission.

SIDNEY, OHIO.

Chambers, V. E., wholesale grain and hay.*†
Custenborder & Co., E. T., buyers and shippers of grain in car lots.*
Wells Co., J. E., wholesale grain, seed.*

SIOUX CITY, IOWA.

Bell, Huntting & Co., grain.

SPRINGFIELD, ILL.

Lloyd & Co., John H., grain merchants.*

TERRE HAUTE, IND.

Kuhn & Co., Paul, receivers and shippers.

TIFFIN, OHIO.

Sncath-Cunningham Co., grain and seeds.

TOLEDO, OHIO.

Chatterton & Son, hay, oats, wheat.*†
De Vore & Co., H. W., grain, seeds.*†
King & Co., C. A., grain and seeds.*†
Raddatz & Co., H. D., grain, seeds.*
Rice Grain Co., receivers and shippers.*
Southworth & Co., grain and seeds.*†
Wickenhiser & Co., John, grain dealers.*
Young Grain Co., grain, seeds.*
Zahn & Co., J. F., grain and seeds.*†

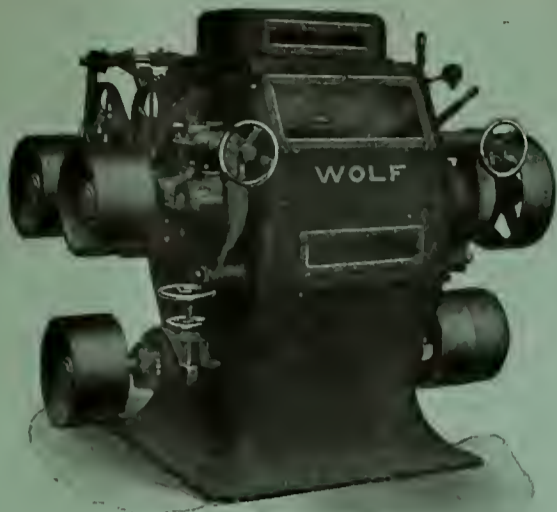
TOPEKA, KAN.

Derby Grain Co., wheat, oats, corn.*
Golden Belt Grain & Elevator Co., grain.*
Crosby & Co., E., grain, flour, feed.*

WINCHESTER, IND.

Goodrich Bros., wholesale grain, seeds, hay.*†

*Members Grain Dealers' National Association. †Members National Hay Association.



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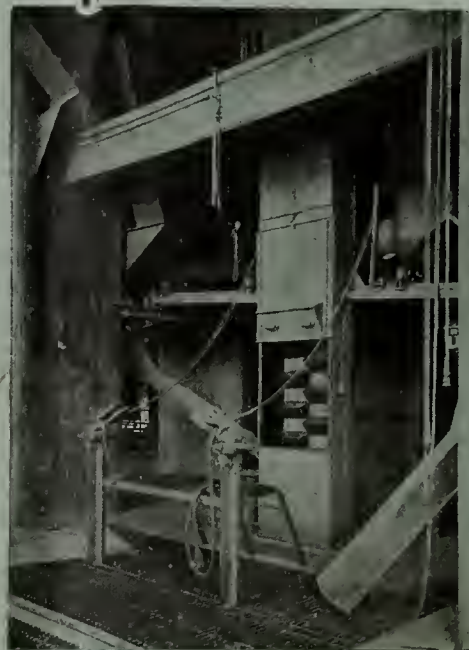
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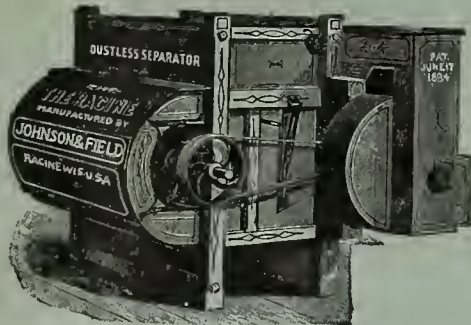
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